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ABSTRACT

This report stems from an extended inquiry into the planning and implementation of new, innovative schools, seen as a useful but failure-prone strategy for educational improvement. The Project on Social Architecture in Education studied the processes and outcomes of efforts to create three elementary and three secondary schools in public urban and suburban school districts. The products of the study include a general conceptual framework for the domain of new-school planning and implementation research instruments; five book-length case studies, together with analyses and conclusions; and a set of learning materials for people creating comprehensive new educational programs in school settings. This document contains chapter 1, an executive summary that briefly reviews the substance of the various parts of the report with their associated chapters; chapter 2, a review of other improvement strategies and a comparison with the new/innovative school as a particular strategy for educational improvement; and chapter 3, the general framework for planning and implementing new schools. (Author/MLF)

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Final Report

Part II: Introduction

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EA 011 516

Final Report

Part I: Introduction

Chapter 1

EXECUTIVE SUMMARY

Chapter 2

NEW SCHOOLS AS A STRATEGY FOR EDUCATIONAL IMPROVEMENT

Chapter 3

PLANNING AND IMPLEMENTING NEW SCHOOLS: A GENERAL FRAMEWORK

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From the Final Report to National Institute of Education, Grant NIE-G-74-0051. Designing and Starting Innovative Schools: a Field Study of Social Architecture in Education. Matthew B. Miles, Principal Investigator.

December, 1978

Introductory Note

This volume is a portion of the Final Report, Grant NIE-G-74-0051, "Designing and Starting Innovative Schools: a field Study of Social Architecture in Education," Matthew B. Miles, Principal Investigator.

The Final Report contains the following parts:

Part I: Introduction

1. Executive Summary
2. New Schools as a Strategy for Educational Improvement
3. Planning and Implementing New Schools: a General Framework

Part II: Research Methods

4. Project Overview
5. Research Methods
   Appendices

Part III: Case Studies

6. Westgate Schools: a case study of two open-space elementary schools
7. Change and Conflict: educational innovation in community context
8. Innovation in Lakeport
   College High School: a planning case study
   The Founding of Julius Appelbaum High School
9. Arts Co-op: an experimental high school program

Part IV: Conclusions

10. Reflections on the Case Studies
11. Implications and Advice

Part V: Mapping New Schools: a series of new-school planning guides

1. Setting the stage for planning
2. Designing your school
3. Mapping your school's environment
4. Making your school work

The Project on Social Architecture in Education has been supported by funds from the National Institute of Education, and from Teacher Corps. The contents of this publication do not necessarily reflect the views or policies of the Department of Health, Education and Welfare, the National Institute of Education, or the Teacher Corps.

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The Project on Social Architecture in Education has engaged the active energies of many people over the past four years. The core research staff responsible for this Final Report were Matthew B. Miles, Ellen W. Sullivan, Barry A. Gold, Beverly Loy Taylor, Sam D. Sieber and David E. Wilder. Their specific writing contributions and their ongoing roles are identified in the Report. The value of four years of satisfying work together goes far beyond any acknowledgement that can be given here.

Dale G. Lake collaborated closely in the creation of the Project and was a strong co-investigator during the first year, with staff members Bunty Ketcham, Denise Burch, and Julie Quain.

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Several dozen colleagues assisted the project with manuscript review, came to our work conferences, and advised on project planning and strategy. They are named at appropriate places in the Report. Here we mention with gratitude those who served in our pool of consultants to school sites: Billie Alban, Marc Bassin, Peter Block, Lloyd Bishop, Bob Chasnoff, Felicia Clark, Al Fitz, Ann Lieberman, Peter Muniz, Saul Pilnick, Herb Shepard, and Mary Hunter Wolf.

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Perhaps our most helpful collaborators must go unidentified. The several hundred people from our six schools whose work we studied were far from being mere objects of study. Many gave active energy to helping us think through the issues of planning and implementation in new schools. They gave us full and thorough access, and many gave extra time. The study would have been impossible without their help. We know from some, and hope for all, that their learning has been as valuable as ours.

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Final Report

Part I: Introduction

Chapter 1

EXECUTIVE SUMMARY

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Chapter 1

EXECUTIVE SUMMARY

Matthew B. Miles

This Final Report stems from an extended inquiry into the planning and implementation of new innovative schools, seen as a useful but failure-prone strategy for educational improvement that is not well understood. The Project on Social Architecture in Education, over four and a half years, studied the processes and outcomes of efforts to create three elementary and three secondary schools in public urban and suburban school districts. The products of the study include a general conceptual framework for the domain of new-school planning and implementation; research instruments; five book-length case studies, together with analysis and conclusions; and a set of learning materials for people creating comprehensive new educational programs in school settings.

The remainder of this summary briefly reviews the substance of the various parts of the Final Report, with their associated chapters.

Part I: Introduction

Chapter 2: New Schools as a Strategy for Educational Improvement

There are many paths to educational improvement, all with varying success rates and associated problems. The new-school strategy can be profitably compared with six other strategies: curricular innovation, role-shaping or in-service training, comprehensive planning, supported implementation, organization development, and school redesign. Creating new schools is a focused, comprehensive strategy that can avoid conservative constraints, permit more experimentation and curricular change, and engage participants actively.

In spite of enrollment decline, there are data indicating that the new-school strategy is currently being used in upwards of 25% of public school districts; some typical uses include alternative and "option" programs, innovative use of underutilized physical plant, open-space schools, new buildings, and work or community-based experience programs.

But the new-school strategy has many difficulties, including high energy requirements, failure-proneness, and low likelihood of being transferred or disseminated to other schools and districts. These difficulties have been explained in many ways by previous research: press from the

environment, over-ambitiousness, internal conflict, managerial inadequacy, lack of self-correction, missing support systems, and failure to do careful planning and design have all been suggested.

A summary of available case studies of new schools suggests that they are variously limited by (a) short time perspective; (b) minimal attention to the environmental context ; (c) sketchy documentation; (d) unclear or limited conceptualization.

A review of training materials generally available to aid new-school planners and implementers suggests that while some are derived from multiple case experience and are clearly conceptualized, most are weak because they (a) rely on written advice; (b) give minimal attention to environmental issues; (c) pay insufficient attention to the "social architectural" issues involved in envisioning, designing, starting up and "fine tuning" the social system of a new school.

Chapter 3: Planning and Implementing New Schools: A General Framework

Over the course of the study, a framework of organizing concepts gradually emerged. It began with a priori lists of variables, which were expanded substantially through field work, then organized and simplified, and placed into an interconnected scheme. Figure 1 shows the components of the scheme in outline form: each component is reviewed below.

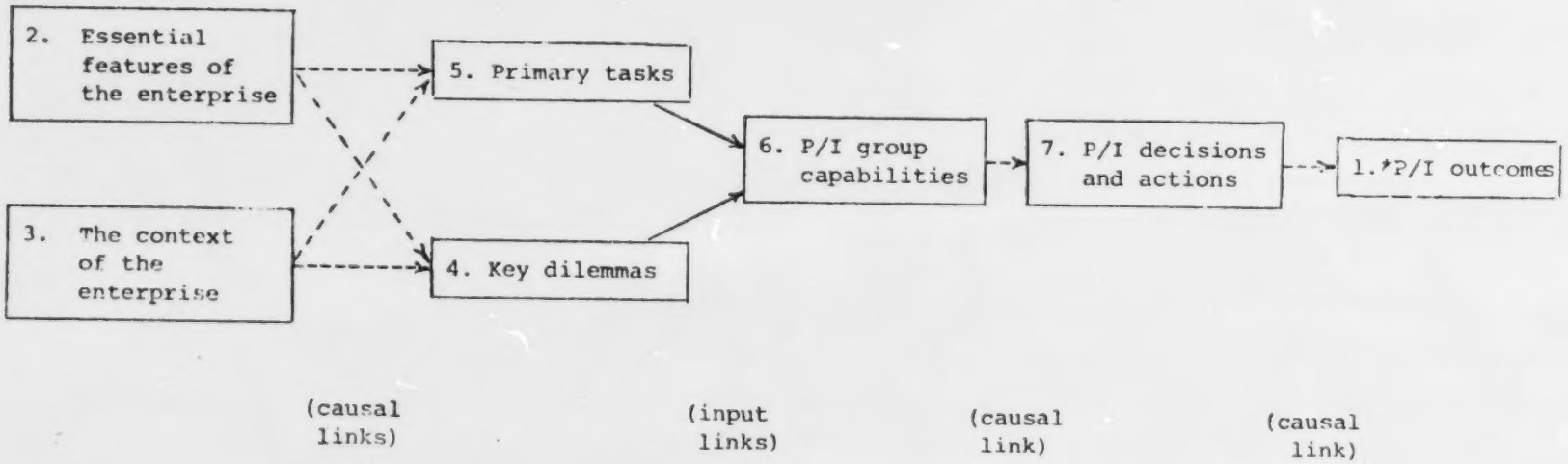
Planning/implementation outcomes. What is "good" planning and implementation, when we are considering the case of new, innovative schools? While the planning/implementation (P/I) process is still under way, success resides in "intermediate" outcomes such as adequacy of obtained financial resources, endorsement from the environment, and the quality and ownership of decisions being made. Once the school is fully operating, there are more ultimate criteria: congruence with original goals, continued problem-solving ability, the satisfaction of stakeholders (students, staff, parents, administrators) and actual achievement of educational goals.

Essential features of the enterprise. The project focused its efforts on whole schools, embedded within local school districts. Their planners expected them to be not only new but innovative, and expected to bring ther into being. These characteristics generated certain typical problems such as task complexity and environmental resistance, and certain needs, such as those for high energy investment and political skill.

The context of the enterprise. The processes being studied occurred in the larger context of American public schools. Schools are settings with relatively diffuse goals and a "people-processing" mission, subject to many structural constraints from the environment. They are staffed by people defining themselves as professionals, but who are working from a weak knowledge base. Finally, schools are non-competitive with each other and publicly "owned"; they are also quite permeable to environmental pressure. These contextual features generate many effects, such as reliance on traditional forms, vulnerability and uncertainty.

Figure 1

FRAMEWORK FOR CONCEPTUALIZING PLANNING AND IMPLEMENTATION



*Numbers refer to the sequence of these topics in the chapter.

Key dilemmas. The nature of new schools, and their placement in a larger context, generate a series of dilemmas for planners and implementers. These conflicts, which are both pervasive and acute, are usually posed as a choice between two "goods". The eight dilemmas are: (1) whether to choose innovative or familiar approaches; (2) whether to retain original planning goals or revise them; (3) whether to stay in active contact with the environment or withdraw from it; (4) whether to seek expert knowledge or rely on one's own resources; (5) whether to seek feedback on P/I efforts or proceed intuitively; (6) whether to constrain or give more autonomy to planners and implementers; (7) whether to let the new school develop "by itself", or intervene directly; and (8) whether to routinize methods and procedures in the new school or leave things open and flexible.

Primary tasks. Planning and implementation are typically carried out by a group (P/I group) such as a planning committee, principal and staff, etc. The work of P/I groups can usefully be described as including six basic tasks. Certain dilemmas come up repeatedly as each task is approached, usually in a roughly developmental order from early to late in the P/I process. The tasks are: (1) political stabilization, (obtaining money, environmental endorsement, and a place in the local power structure); (2) knowledge utilization (acquiring and using technically-good information, expertise); (3) vision development (developing coherence among basic philosophy, goals, and desired identity or image of the school); (4) social-architectural design (creating an organizational plan, and selecting people to be part of it); (5) actualization (linking the plan to start-up and early implementation, developing the real social system of the school); and (6) institutionalization (stabilizing the school, including its methods for continuing self-renewal.

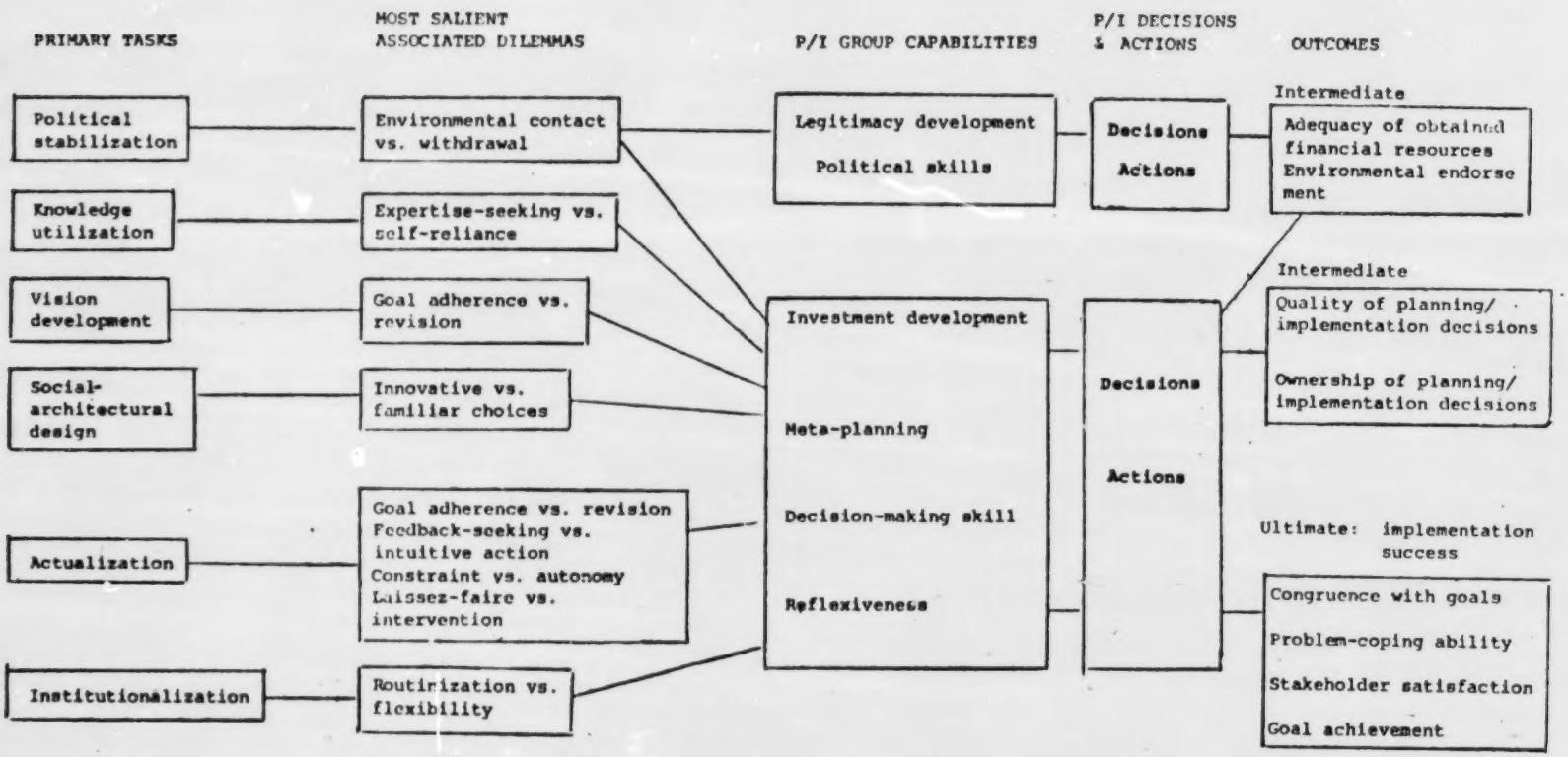
P/I group capabilities. Just how well P/I groups deal with their primary tasks and resolve their dilemmas depends on six general capabilities: (1) legitimacy development (developing a "license to plan" and the right to act); (2) investment development (building motivation and commitment); (3) meta-planning (the development and use of a "plan for planning"); (4) political skill (getting continued resources and endorsement from the environment); (5) reflexiveness (getting data to steer P/I actions); and (6) decision-making skill (producing technically good, "owned" decisions).

The decisions made, and actions carried out by P/I groups over time, result in more or less successful outcomes. The case studies of Part III document the exigencies and complexity of the processes involved.

Figure 2 displays the relationships posited among the variables in the over-all framework.

Fig. 2

RELATIONSHIP OF MAJOR VARIABLES IN OVER-ALL FRAMEWORK



Part II: Research Methods

Project Overview

The project's goals were (1) to describe empirical stages in the social-architectural process, defined as envisioning, designing and bringing into being the new social system of an innovative school; (2) to assess the success of innovative intent; (3) to study linkages between stages of the social-architectural process; and (4) to study methods of facilitating effective school design and start-up. As the study proceeded, it added a fifth objective: the production of learning materials to aid those planning and implementing new schools.

The project, designed for three years, but extended to 4 1/2, was staffed by a principal investigator, three field workers, part-time research associates, a materials developer (in 3rd and 4th years), and secretarial and clerical support. The most frequent strains in the project included ambitiousness, overload, collegial decision-making, and delay in product completion.

Project results were disseminated through convention papers, work conferences, and workshops, and the planning guides which appear in Part V.

Research Methods

Retrieval of prior research and experience. The available literature, eight recently-opened schools, and 11 experienced planners and consultants were studied to locate recurring issues. Literature relevant to domains covered in the learning materials (Part V of this Final Report) was also scanned.

Acquisition of research sites. Working from a pool of 58 possible sites where planning for a new school was under way, the project formed contractual agreements with six schools, which we list (pseudonymously) as follows:

Westgate Schools #2 and #3: two open-space elementary schools in a suburban district.

Lincoln Acres: an open-space elementary school in a suburban district.

College High School: a campus-based school uniting the resources of a college and the Lakeport urban school district. (This site never opened for students.)

Appelbaum High School: an experimental high school for business careers, also in Lakeport.

Arts Co-op: an experimental half-day arts program for students from one urban and six suburban school districts.

Site agreements promised full access, confidentiality and anonymity; the project provided matching funds for use of any of a pool of consultants to aid P/I work.

Conceptualization. Conceptual development occurred continuously over the life of the project, and included early concept papers, convention papers, the listing of variables needed for field work and survey instruments, and the development of propositions into the general framework of Chapter 3.

Instrument development. The project developed a number of interview guides and questionnaires on particular aspects of P/I work; a series of staff, parent and student surveys to assess the "state of the system" in implemented schools; and successively elaborated and refined methods of coding and storing the reuslts of field work. See Appendices to Chapter 5.

Data collection. Each field worker had a primary, and a secondary site shared with another worker. Sites were visited weekly, for periods of up to two years. Non-participant observation, informal and formal interviews were used; available documents were collected. Running notes were written up, then coded and stored. Systematic coding ran behind and was eventually discarded.

In each opened school there were from one to three waves of survey data collection from staff (and often parents and/or students as well). Wave 1 was after three to four months of implementation, with following waves at the end of Year 1 and, where feasible, Year 2.

Data analysis. The qualitative data, originally broken into incidents/excerpts, were coded as noted above. This method gave way to field workers doing summary ratings and analysis of each contact. Informal data analysis methods, such as written "site summaries," regular staff meetings to review status in each site and propose hypotheses proved more useful. The survey data were used to assess the degree to which the implemented schools were congruent with their planners' hopes. A systematic review of eight texts on field methods showed clearly that few formal guidelines for the analysis of qualitative data exist: the project developed some proposed ones, but found that case studies were largely produced in a very labor-intensive fashion, using an outline generated from the general conceptual framework described above. Confidence in the case analyses was improved by staff review and revision, and through feedback of draft versions to personnel in all the sites studied, who were invited to provide correction and commentary. Cross-site generalizations were drawn using the conceptual framework.

In general, the project found that "bureaucratized," multiple-site field work presents many problems in addition to those encountered by the traditional lone ethnographer, but considered that they had been dealt with successfully.

Part III: Case Studies

Five case studies were produced from the data collected at each site, using a common outline developed from the conceptual framework. Each case provides a general overview of the school as it now exists, then backtracks to its early history. The flow of planning and implementation over time is followed closely, with descriptive sections alternating with analysis and commentary. A summary of the school's degree of success, and explanations for it, is followed by commentary from participants in the case and general conclusions.

We include here brief summaries of each case.

Chapter 6: Westgate Schools (178 pp.)

In this small, somewhat conservative suburban district, a decision was made in early 1974 to replace one antiquated elementary school (School No. 2) and add to another (School No. 3): both schools were designed as open-space settings, and the hope was to implement "open education," with a somewhat unclear hope for individualization of instruction, carried out by teaching teams. Data were collected on the planning and implementation process from September 1975 to January 1978.

The planning period was characterized by careful decision-making by a P/I group consisting of the 4 elementary school principals and two central office administrators. Their work had a "top-down" emphasis: they took responsibility for the politically sensitive issue of rezoning, designing in-service education for teachers, and assigning teachers to the two new schools. They used little consulting help. The schools were, in general, conventionally organized and few plans were made for start-up.

Early implementation was extremely stressful, since teachers had had no prior experience with team teaching, had almost no prior training and received little help. Implementation gradually improved over time, largely through teacher trial and error, and the development of informal support systems within and across teaching teams. The principal's social support also seemed crucial. Parental criticism became acute at one point for School 2, but was effectively defused. In general, both schools were well buffered from environmental pressure.

At the end of the first year, both schools had achieved a moderately good implementation of original hopes, for somewhat over half of the teachers. Teachers and parents were satisfied. School 2 teachers implemented open education more fully (and satisfyingly) because of a well-developed support system; School 3 was divided into cliques, one of which resisted implementation. At the end of the second year, implementation was poorer in School 2 because of the reconstitution of teaching teams; in School 3 it was about the same. The remarkable feature of the case was the degree of implementation that emerged, given sketchy planning, minimal training and assistance to teachers, and lack of teacher participation in planning.

Chapter 7: Change and Conflict (394 pp.)

Lincoln Acres, an upwardly-mobile development in a suburban community with a history of educational innovation, was begun in 1970. A 1972 bond issue approved the building of a new open-space elementary school. The hopes were to create a humanely oriented, flexible program, in which teaching teams would utilize the open space in creative ways, emphasizing individualization. It would be a "lighthouse" school for the district. Data were collected from December 1974 through June of 1977.

The early planning left most details open, and the final planning was carried out collaboratively by the new principal and the staff during the summer of 1975. The effort was to build a cohesive, collegial group from those who had volunteered for the faculty. The planning, however, largely ignored growing community criticism: parents felt their expectations for walls dividing the open space (and for more-traditional learning options) had been violated. The faculty agreed to a compromise involving some added walls.

When the school opened, the conflict between parents and the school intensified; many volunteered as aides,sharpening their criticism of ineffective teaching as a result of what they saw. Internal coordination and problem-solving were poor, and the principal provided little support. The conflict culminated by Christmas in the firing of a teacher, and school reorganization mandated by the superintendent; this was followed by mistrustful, conflictful relations between principal and faculty, movement toward self-contained classrooms, and increased bureaucratization. Community attitudes improved; they felt the school to be more responsive to their wishes. The principal resigned in the spring. The new principal concentrated on stabilizing, supporting and strengthening the school and its relations to the environment, and was quite successful.

Although much was lost from the original vision, the school after two years was coping reasonably well, and was satisfying to its stakeholders. The case shows dramatically how environmental pressures on a school, in conjunction with internal difficulties and weaknesses, can induce radical organizational change over time--in this case from a "collegial" organization to a coercive, then a bureaucratic one, gradually moving back in a collegial direction.

Chapter 8: Innovation in Lakeport

This chapter contains two case studies, set in a large urban district with an entrenched central office bureaucracy and a militant teachers' union. The pressures of a fiscal crisis surrounded both efforts.

College High School (92 pp.) This experimental high school was intended to serve inner-city students by providing a humane learning environment oriented to "basic skills and beyond." It would draw on the

resources of two sponsoring organizations--the school district and a municipal college--and be sited on the campus. District teachers and college professors alike would serve on the faculty. Data were collected beginning in April 1975, but in October of 1976, the project was aborted; the school has to date not been implemented.

The planning was carried out beginning in 1974 by a design committee with experienced representatives from the central office, the teachers union, and the college; it was to report to a higher-level group of the heads of these agencies. But the committee never generated full commitment, felt great uncertainty about the likelihood of implementation, and had meeting after meeting that went in circles; they rejected consultants' efforts to help. The design of the school began to depart from the original "humane" vision, because of bureaucratic and union constraints as well as the anarchic work style of the planners. No way was ever created to build college faculty into the plan.

In the early summer of 1976 it appeared the school could be sited in a high school annex, and an acting director from the planning group began planning in the fall with volunteer teachers there (further departing from original goals in the process). But the project was abruptly terminated by the high school's principal when he realized that College High's stay would only be temporary.

The case is a particularly interesting exhibit of what happens when planners accept a weak mandate from a turbulent environment, and cannot muster the capabilities needed for systematic planning internally, or proactive political maneuvering externally.

The founding of Julius Appelbaum High School (89 pp.). But the problems of Lakeport were not all-determinative: the course of planning and implementation for this experimental high school for business careers was quite different. The original hopes were to provide innovative learning experiences, linking a strong academic program, business courses, and direct work experience in the offices of the nearby financial and business community. Data collection took place between November 1974 and June 1977.

The planning coordinator for Appelbaum began work in May of 1974. Working with an assistant and one consultant, she developed working linkages with many businessmen and to central office administrators. Her hopes for the school as an innovative prototype were for academic excellence (going beyond terminal vocational education) and a range of methods including work experience programs, flexible scheduling, independent study, and a range of special majors (international trade, insurance, etc.). The planner also hoped for egalitarian, humane relationships in the school. But she never evolved a comprehensive, coherent set of objectives or organizational design. She had hoped to direct the school, but a political turn of events installed another person, well connected to the bureaucracy, as principal.

The new principal seemed largely uncommitted to the planner's vision, and the summer planning institute for the teachers he hired (many of whom

were uninterested in innovative ideas) did little to move the plans for the school beyond familiar, conventional ideas. Involvement with the business community decreased substantially.

When the school opened for 500 students in a temporary college facility, the students' ability level proved lower than had been hoped, and faculty were even less inclined to be experimental. The principal postponed most of the innovations that had been originally considered, and operated the school from an aloof, arbitrary rule-oriented stance, minimizing faculty participation. When the school moved to its large new building in March, these patterns changed little, and faculty morale and satisfaction were lower. Most faculty appeared to be teaching in a traditional manner.

In the second year, the school doubled to 1,000 students. Though a work experience coordinator was appointed, few of the original innovations were put in place, and the principal rejected consulting help that might have aided implementation, retaining strong control over the school. Faculty attitudes were mixed. The school did run smoothly, with student and parent satisfaction. On reading the case account, the principal was incensed, claiming that "innovation" had never been intended, and that the school was in fact a success. The case is most interesting for the sharp discontinuity between planning and implementation and the strong movement toward bureaucratization driven by, as the case puts it, "the key planner's neglect of substance and the key implementer's neglect of human relations."

Chapter 9: Arts Co-op (269 pp.)

This regional experimental high school program for the arts was to draw students (half-time) from a city and suburban towns. Practicing artists would be the faculty. An intermediate service center launched planning for it in April 1974. Data collection took place from February 1975 through June of 1978.

The planners, a large committee of representatives from the participating school districts, were actively committed to a program that would identify and minister to talented youth, promote urban-suburban and racial integration, and develop a "community of the arts." Under the leadership of a key intermediate agency person, they worked systematically and thoroughly to refine the goals and vision, hire a director, and deal with the delicate problems of maintaining a multi-district effort: its financing, its accountability, and how it would be controlled and managed.

The new director worked closely with the key planner during transition, selected staff, and created a student selection procedure; these actions were well linked to the original vision. But an unanticipated problem began developing: the inter-district governance structure set up for the school was too weak to protect the emerging school against the arbitrary and controlling actions of the new head of the intermediate agency, with whom the school's director was in a continuous power struggle.

When the school opened for its 62 students in February of 1976, the faculty of artists did indeed engage in creative, top-quality teaching, and students were excited and challenged by the learning environment. But there were persistent problems in creating a "community of the arts," and the director became more and more central, taking on most planning and problem-solving functions, and buffering the faculty from his struggle with the agency director. Both internal and external issues came to a head in April: the faculty confronted the director in mistrust and anger over his arbitrary actions, and the agency head successfully disenfranchised the governance structure of the school and asserted his own power over it.

Over the summer, the school's director worked successfully to rebuild working relationships with old and new staff, and the second year went well. But the agency head increasingly encroached on the director's power, and the director submitted his resignation in February of 1977. The future of the school with a new director is not certain.

Arts Co-op was perhaps the most thoroughgoing and innovative implementation of a vision among all our sites. But its capable and conscientious planners and director were unable to muster the resources to come out on top in the power struggle with its own parent agency.

Part IV: Conclusions

Chapter 10: Reflections on the Case Studies

Implementation success. Most of the schools showed a great deal of slippage between their original goals and final implementation. However, they coped reasonably well with ongoing problems. Parents and students were reasonably satisfied, but teacher attitudes varied a good deal depending on the progress of implementation. Student achievement was probably as good as (or better than) that in other comparable schools.

Most of the schools were able to get financial resources and environmental endorsement successfully. These outcomes, if accompanied by technically good, accepted planning decisions, tended to predict successful implementation.

Primary tasks. The task of political stabilization involves the mobilization of both legitimacy and power; it loomed very large in the case studies, because schools are embedded in the district bureaucracy and a locally-controlling community. Unforeseen contingencies place further limits on rationality. Most planners studied had at least informal legitimacy, but almost no power to compel implementation; that rested ultimately with those who were operators of the implemented school. Strategies used to gain legitimacy and power occasionally had undesired back effects, especially when they were non-licit or encouraged inward-turning avoidance.

Finally, conflict between professional and community control was present in most of the cases. It appeared that the dilemma of environmental contact vs. avoidance was never solved in a way that protected the school's original vision: compliance with external pressure was usually traded for needed resources.

Knowledge utilization, the search for and use of technically valid information that can aid the new school, was quite infrequent in the cases: most planners and implementers relied on internal resources. Self-reliance seems to come from insecurity, the need for esprit development, the ideology of professional autonomy, and local pressures for conformity. The only site that used expert knowledge heavily was Arts Co-op: its regional (non-local) nature, and its cosmopolitan, secure, staff with a set away from routinization seemed the causes.

Vision development was marked in the case studies by a good deal of goal revision rather than firm adherence; this had many sources ranging from lack of power and legitimacy to personnel turnover, socialization failure, and the existence of structural constraints in the environment. Environmental conservatism and control, where emphasis is placed on "basics," and on educational outcomes rather than process, seemed crucial. Such pressures were less determinative in special-purpose schools such as the arts and business schools we studied.

Social-architectural design work was often done in these sites with little explicit awareness and commitment. Planners worked non-linearly with shifting, redefined goals, vaguely-seen design requirements, and a set of largely unquestioned constraints. Their conceptual mapping of schools tended to be technically-oriented and personalistic, rather than organizationally-focused. In several cases, reluctance to design differentiated, hierarchical roles made for much difficulty later on.

Planners usually did not consider a wide range of design alternatives, and opted largely for the familiar, within-school ones. Design of externally-oriented structures (ex: for parent involvement) was less frequent.

Finally, most sites set aside little explicit time and energy for social architecture, doing it implicitly (and often hastily). The resulting "designs" were often incongruent with goals, and many goals had weak structures (or no structures at all) supporting them in the actualized school.

Actualization, the congruent realization of a social-architectural design, varied in style considerably in the sites. One school had almost immediate actualization; two others showed gradual and incremental actualization; another started well but almost immediately lost key aspects of its vision, followed by gradual regaining of them; another discarded the vision and became conventionally organized. The main factors explaining these differences seemed to be the adequacy of linkage between planning and implementation, the care taken in developing the investment of teachers, and the provision of support during implementation.

Several of the schools had implicit or explicit hopes to become "collegial" rather than traditional bureaucratic organizations. However, such forms--more collaborative, personal, less differentiated--were not often realized, or were ephemeral. The drift toward bureaucratization seemed to be caused by poor organizational design, inappropriate socialization, and environmental pressures. Collegial forms are also poor at centralized decision-making, conflict management and protection from ineptitude. However, they were achieved (and functioned well) in a few of our sites by means of careful design, social support, environmental buffering, or a combination of these.

Institutionalization, stabilization of the new school, occurred largely "naturally"; the main reasons for it seemed to be the clarity of the initial vision, the experience and skills of teachers, the degree of rule orientation, and the presence of conflict (either internal or between school and community), which led to the creation of firmer structures. School leaders were very central in aiding institutionalization; though widely varying styles supported institutionalization, the leader's personal predictability (steadiness, non-capriciousness) seemed important. Finally, most sites did little to build in a self-renewing capability to their systems.

Planning/Implementation Group Capabilities

Not surprisingly, where capabilities were weak, sites encountered serious difficulty. In particular, schools where the externally-oriented capabilities of legitimacy development and political skill were inadequate ran into serious conflict and became vulnerable to external pressure.

Once schools opened for students, there was less emphasis on investment development, decision-making skill and on meta-planning than during initial planning. Even so, meta-planning, the provision of a coherent, over-all design for continued planning and implementation, seemed almost as important a capability as the environmental skills mentioned above, and decision-making (which often became more centralized in the sites during implementation) quite crucial. Most of the sites studied had weak reflexivity; the data they used to steer decision-making were sketchy and intuitive. Large amounts of data were not necessarily helpful; it may be that what new schools need is salient, compelling, and usable information, of the sort typically garnered in informal interaction.

Chapter 11: Implications and Advice

Suggestions for planners and implementers of new schools included a warning re the complexity they face; the advice that a reasonable degree of rationality in planning (and indeed in relation to the politics of the enterprise) is possible and desirable; and the admonition that it is much easier to produce a reasonably good school than the innovative school of one's dreams. Planners and implementers were also urged to pay central and explicit attention to social-architectural design, to use technical assistance (including materials); and to provide essential protection and support for new schools.

Funding agencies were told that more-than-incremental add-on funds are typically needed for effective creation of new schools, but that the new-school strategy for educational change is workable, if adequate resources, lead time, protection and technical assistance are present to insure the presence of the innovative components the school is supposed to exemplify. Dissemination mechanisms need building in as well. We also recommend that methodological studies of the nature and utility of qualitative research as a means for understanding educational change be supported.

Consultants and facilitators can expect to have difficulty in access to new schools as clients, and are advised to attempt such entry early. The use of supporting materials such as Mapping New Schools (Part V of this Final Report) is advised.

Our concluding suggestions went to researchers and students of educational change. They were encouraged to consider the ways in which new-school change efforts are different from those involving the introduction of innovations into established settings, and to develop better explanations for the counter-theoretical and suprising events we repeatedly noticed in our sites. Methodological suggestions made included: early emphasis on conceptual framework development; less-obsessive coding; analysis efforts scheduled from the beginning of the project; use of both qualitative and quantitative data; and project organization which is either more hierarchical or more fully collegial than ours was. An ongoing dissemination component was recommended for studies like these. We concluded with encouragement for considerably more empirical research on the design and actualization of new organizations, both in and out of education.

Part V: Mapping New Schools: a series of new-school planning guides

These learning materials are aimed at providing direct help to persons planning and implementing new schools, including substantially redesigned schools and comprehensive programs.

They are not aimed at specific, technical tasks of new schools, such as curriculum or materials selection, but at the generic issues of planning and implementation faced by all new schools, such as goal and vision clarification, organizational design, obtaining resources and support, start-up, trouble-shooting and institutionalization. They were developed from the Social Architecture Project's studies of new schools, from consultant experience, and from existing research.

The guides consist of individual readings (both conceptual background and case examples) and individual or group exercises in workbook form, which are open-ended and self-analyzing, rather than including prescriptive answers. They are free-standing and can be used without a consultant's help. The guides are broken into modules which can be used independently of each other. Each guide includes an extensive list of other resources, in the areas of group and organizational functioning, meetings, organiza-

tional design, organization development, networks, community functioning, planning, implementation, in-service education, alternative staffing, organizing for instruction and multi-cultural education. The substance of the four guides is outlined below.

Guide 1: Setting the stage for planning. This guide (120 pp., 12 exercises) orients the reader to the planning enterprise: after dealing with planning group composition, functioning and decision-making methods, it discusses the primary planning tasks for a new school. Remaining sections include work on adaptive planning methods, use of consultants, and the creation of a meta-plan.

Guide 2: Designing Your School. This guide (133 pp., 24 exercises) focuses on methods of identifying and clarifying goals for the new school, then on the design of social systems generally and new schools specifically. The exercises provide a range of experiences in designing general and specific aspects of new schools, and pre-evaluating their effectiveness.

Guide 3: Mapping Your School's Environment. This guide (126 pp., 13 exercises) looks at the political side of planning new schools: it examines the interface between planners/implementers and their environment (district, community); and emphasizes careful environmental analysis, building of internal group capability, and management of environmental contacts. Strategies including cooptation, bargaining, circumvention and buffering are explained and illustrated.

Guide 4: Making Your School Work. This guide (149 pp., 17 exercises) focuses on linkage between planning and implementation, and protection of the new school, then turns to methods for staffing. It also deals with troubleshooting after initial start-up, with methods of diagnosis and intervention aimed at improvement during early implementation, and at methods of renewal and stabilization.

LIST OF AVAILABLE PROJECT DOCUMENTS AND MATERIALS

The following documents, produced during the course of the Project on Social Architecture, are available at cost from the Center for Policy Research. Amounts shown should be remitted with order.

Miles, M.B., E.W.Sullivan, B.A.Gold, B.L.Taylor, S.D.Sieber, and D.E.Wilder. Final Report, Designing and starting innovative schools: a field study of social architecture in education. NIE Grant NIE-G-74-0051, 1978

Part I, $8.00. Part II, $16.00. Part III, Chapter 6, $13.00; Chapter 7, $28.50; Chapter 8, $14.00; Chapter 9, $19.00. Part IV, $4.00. Part V, $35.00; each guide separately, $9.00.

* *

Galanter, W. Elementary school staff support system effects on program implementation and job satisfaction. Ph.D. dissertation, Fordham University, 1978. $12.00 (also available through University Microfilms).

Gold, B.A. The bureaucratization of a planned non-bureaucratic school. Paper read at American Educational Research Association meetings, 1976. $1.75.

Gold, B.A. Change and conflict: educational innovation in community context. Ph.D. dissertation, Columbia University, 1977. $47.00 (also available through University Microfilms).

Ketcham, B. and Lake, D.G. Before and after the beginning: the creation of Mark Twain School. New York: Center for Policy Research, 1975. $8.50.

Lake, D.G. and Ketcham, B. Social architecture and education: some initial findings. Paper read to American Psychological Association meetings, 1975. $1.25.

Miles, M.B. Planning and design process for new schools: some alternative views. Project on Social Architecture in Education. New York: Center for Policy Research, 1975. $3.00.

Miles, M.B. Thinking about how to do it: alternative models for planning and implementation of new schools. Paper read at American Educational Research Association meetings, 1976. $2.00.

Miles, M.B. and Lake, D.G. Communication networks in the designing and starting of new schools. Paper read at American Educational Research Association meetings, 1975. $1.00.

Project on Social Architecture in Education. Conference summary, Work Conference on Problems of Creating New Schools, June 17-18, 1976. $4.75.

Sieber, S.D. Memorandum on qualitative analysis for Social Architecture Project. Internal memo, Project on Social Architecture in Education. New York: Center for Policy Research, 1976. $1.00.

Sieber, S.D. A synopsis and critique of guidelines for qualitative analysis contained in selected textbooks. Internal memo, Project on Social Architecture in Education. New York: Center for Policy Research, 1976. $1.00.

Sieber, S.D. Knowledge utilization strategies in the design and implementation of new schools. Paper read to American Educational Research Association meetings, 1976. $1.00.

Sullivan, E.W. The roles of the leader and the core group in planning new schools. Project paper, Project on Social Architecture in Education. New York: Center for Policy Research, 1975. $3.50.

Sullivan, E.W. and Kironde, E.W. Circumvention and cooptation in the planning of new schools. Paper read to American Educational Research Association meetings, 1976.

Taylor, B.L., Sullivan, E.W., and Dollar, B. Mapping Teacher Corps projects. New York: Center for Policy Research, 1978. (Available from Dr. Floyd T. Waterman, Center for Urban Education, University of Nebraska at Omaha, 3805 North 16th St., Omaha, NE 68110.)

Wilder, D. Goals for new schools. agreement, succession and displacement. Paper read to American Educational Research Association meetings, 1976. $1.50.

Final Report

Part I: Introduction

Chapter 2

NEW SCHOOLS AS A STRATEGY FOR EDUCATIONAL IMPROVEMENT

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From the Final Report to National Institute of Education, Grant NIE-G-74-0051. Designing and Starting Innovative Schools: a Field Study of Social Architecture in Education. Matthew B. Miles, Principal Investigator.

December, 1978

Chapter 2

NEW SCHOOLS AS A STRATEGY FOR EDUCATIONAL IMPROVEMENT

Matthew B. Miles

Q: How can the schools be improved?

A: In almost every way conceivable.

--From a conference on educational innovation.

The Project on Social Architecture in Education was focused on a particular strategy for educational improvement--the creation of a new, innovative school. We need to place our work in context. So in this chapter we first review briefly what some other familiar improvement strategies look like, then make some comparisons. Then we discuss why the creation of new schools is attractive to reformers, and outline some of the characteristic difficulties people face when they attempt this strategy. The chapter concludes with a brief review of other prior work on the creation of new schools.

Alternative Strategies for School Improvement

As our epigraph suggests, there are many paths to school improvement. We outline seven here. All these strategies have strengths; all have weaknesses and difficulties. There is no royal road to school improvement. Or, if there is one, it does not yet appear on available maps.

Curricular innovation. In the late 50's and early 60's, there were widespread efforts to improve schools through the creation of new teaching materials and practices, which their inventors expected would improve schools where they were "adopted." Such strategies, basically, took the organization of the school as a given, or varied it in non-fundamental ways--innovating "in," not "of" the system. Although a wide range of new curriculum content was created (Miles, 1964), it was by no means clear that (a) the innovations were in fact durably adopted or (b) if they were, the adoption was done with high "fidelity" to the original;[1)]

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1) There was also lurking the dire possibility that the innovations themselves, even if well-installed, were not efficacious or worthwhile.

or, more basically, that (c) the innovations simply did not address the basic ills of schools; and/or (d) the organizational properties of schools served to block or nullify the potential benefits of specific innovations.

More recently, it has been shown that even sophisticated and well-developed efforts to use this strategy (the Product Information Packages approach, designed to help teachers adopt "stand-alone" packages) are not markedly successful, unless aided by careful consultative help. (Stearns and Norwood, 1977).

Role-shaping strategies. Another frequently-used strategy for change emphasizes alteration or resocialization of role occupants. Teachers, in particular, are the targets: they attend workshops, courses, and a range of learning experiences from sensitivity training to micro-teaching, interaction analysis, and content training through NSF summer workshops. The aim of the strategy is to improve skills in the delivery of educational services. This family of change strategies, too, takes the organizational environment largely as given: the issue is change in individuals. But few educators would claim that in-service education has traditionally been anything more than sporadic or ineffectual. Rubin (1971), for example, showed that very substantial improvements in this strategy are essential--and more recent accounts (Edelfelt and Johnson, 1975) are not more encouraging.

Comprehensive planning. The late 60's and early 70's also saw the emergence of efforts to improve schools through substantial input of funds aimed at generating thoroughgoing, system-wide planning for change and improvement. Some of these programs were quite general (the Experimental Schools effort, for example), and some devoted to particular aspects of schooling (the Right to Read program, vocational education or the Title III ESEA program). As Herriott and Gross (1979) and Berman and McLaughlin (1976) have shown, the majority of these programs did not come anywhere near the degree of change their designers and operators had hoped for. The reasons vary widely: local district and community politics; the search for Federal funds in an opportunistic, rather than a problem-solving way; the failure to provide close support and training for teachers; difficulty in institutionalizing the programs after the end of outside support.

Where such programs were successful, Berman and McLaughlin found, a sort of "mutual adaptation" had taken place: the local school organization had become altered in the very process of bending and fitting the innovative program to meet local requirements. This process, McLaughlin (1976) noted, was especially important when a shift in classroom organizational structure--a far more complicated change than simply adopting a specific set of learning materials--was in focus. It was clear that such adaptation only took place in the presence of strong staff training, effective consultative assistance, local materials development, and active involvement of staff in planning. This added up to increased participation in the change process, a feature not without its difficulties, but clearly central in effective implementation of curriculur change (Fullan and Pomfret, 1977).

Supported implementation. Over the past half-dozen years or so, the weaknesses of the general strategies discussed so far led to a more sophisticated version. It was aimed at strengthening the quality of what was being innovated, and shepherding the user through the complicated and failure-prone process of adoption and implementation. A good deal of energy went into research and development behind specific educational programs and practices (NIE, 1976), and delivery methods were developed which involved aid to the user at every stage of the change effort: initial awareness of the innovation as a possible answer to assessed needs; decision-making about adoption; initial training; and at-the-elbow support during early implementation. As Dollar (1978) has pointed out, this strategy represented a shift away from "top-down" or "end of the R&D pipeline" approaches, and an increasing sophistication about the process of educational change (as contrasted with the earlier hope that "good content" would do the trick). Preliminary evidence on this strategy (Emrick, et al., 1977) is encouraging. But we must note a limitation: the strategy is more often successful with relatively straightforward educational products, less so with comprehensive, demanding ones of the sort that may be necessary for long-term improvement.

Organization development. Another change strategy which began appearing in the mid-60's took the local district, and the school, as targets of change. As Miles remarked in 1965:

> Economy of effort would suggest that we should look at the state of /a school/ organization's health as such, and try to improve it--in preference to struggling with a series of more or less inspired short-run change efforts as ends in themselves...attention to organization health ought to be priority one for any administrator seriously concerned with innovativeness...

Organization development, a long-range collaborative strategy adapted from industrial settings, involves teachers and administrators, working as members of intact social systems with the aid of change agents, in data collection on their own functioning, problem-solving on the issues diagnosed, and the development of self-renewing capability. It is a form of reflexive action research. The value of OD is that the local organization is not taken as a given, but is treated as itself changeable. The early results of research on OD (Schmuck and Miles, 1971) were only moderately encouraging. The most recent assessment (Miles, Fullan and Taylor, 1978) shows that OD has successfully improved school functioning, adoption of other, specific educational innovations, and possibly student achievement in most districts where it has been tried in a sustained way. But less than 1% of U.S. school districts have adopted OD, and the prospects for wider diffusion are not well assured.

Redesign. Another organizationally-focused approach to school improvement involves direct structural change in existing schools. Individually Guided Education (Parker, 1977), for example, alters the basic set-up of elementary schools to enable team planning among sub-

units of teachers, with coordinated problem-solving and planning for instruction not possible in self-contained classrooms. The results have been claimed to be highly positive, but the energy required to shift existing schools to this sort of form (see Charters, et al., 1973) can be substantial. Even where experienced OD consultants helped schools shift toward "multi-unit" organization (a similar design), up to one year of pre-planning and another year of careful consultative training and help were needed; even so, only half of the schools aided were successful (Schmuck, et al., 1975).

Creating new schools. Designing a new school from the ground up has always been a preferred strategy for those who would reform education: we think immediately of Pestalozzi, Montessori, and Dewey as historical examples of those with a new educational vision who were convinced the best way to advance it was exemplifying it in a concrete setting. That hope, shared by the alternative-school reformers of the 60's, is a plausible one, for many reasons.

1. Advantages. First, in a new school, the constraints of the established system can be bypassed, and the vested interests of various parties set aside for the moment. Secondly, personnel favorable to the new school can be recruited, so that resistance is absent, and the energy of well-trained true believers brought to bear. Third, protection of the new school from the environment means that all energies can be fully focused on the task; experimentation and "fine tuning" are possible, so the vision can be actualized in something like its "pure" or optimal form, freed of expedient alterations. This actualization is often better because of strong participant motivation. There are "process benefits" for members of the new school--the excitement of sharing in a new enterprise, the freedom to innovate, and the autonomy involved in creating something for which one is responsible. As Sarason (1972) remarks.

> Practically everyone ...assumes that becoming a principal of a new school is much to be preferred to assuming leadership of an older school....the fantasy that one is starting "fresh" engenders a great deal of motivation, enthusiasm, and much hope that life in this school will be different.

Finally, most reformers believe, with some justification, that an actual demonstration of a new educational set-up can do far more to diffuse their ideas and vision than any amount of writing: the test of a new educational idea in this sense is whether potential adopters can actually see it working.

2. Comparison with other strategies. As we shall note shortly, the new-school strategy has many weaknesses and problems which vitiate these advantages. But it may be useful first to compare it with the other strategies we have reviewed.

The new-school strategy is comprehensive and organizationally-focused, like OD, redesign and comprehensive planning. But its de novo aspect is an advantage over all three. Its very comprehensiveness, of course, may make for difficulty and overload.

The strategy permits--though is not limited to--the adoption of specific curricular practices. In principle it should be easier to introduce such innovations when one is building from the ground up--though, one could argue, it is hard enough to start a brand new school without worrying about the details of many specific new practices to boot.

The strategy is probably more likely to involve user participation than traditional top-down, engineering-like, managerially-oriented approaches to change. Those creating new schools usually realize that they cannot be mandated, but must be jointly created. But the very complexity and comprehensiveness, and the uncertainty attendant on the creation of new schools often make their leaders rather central, both as charismatic carriers of "the vision," and as managers of its actualization.

The New-School Strategy in the Current Educational Context

The currently prevailing stereotype is that because of declining enrollments and a "back to the basics" mood, few new schools are now being created--in contrast to the vigorous flowering of "free schools" (Graubard, 1972) and alternatives of all types during the late 60's.

But there is a good deal of evidence that the new-school strategy for educational change is still being used with surprising frequency.

A recent estimate (Bass, 1978) is that 25% of American public schools districts have created "alternative programs" to enable a wider range of choice. Such programs, as Cohen and Farrar (1978) have pointed out, are not only politically popular, since they offer parents greater control over the sort of school their children are attending, but are satisfying to the teachers who volunteer for them, since they can shape the curriculum, work with students who have "chosen" to come, and operate according to their preferred teaching styles.

The scale of current and projected enrollment decline in the U.S. is not small: elementary enrollment, at a 32 million peak in 1967, will be down to 28 million by 1981. Secondary figures were 21 million in 1975, and will drop to 17 million in 1985. These represent declines of up to 2% a year. Many districts have responded by closing schools, but closings have proven politically turbulent in many cases, leading to an alternate strategy: exploring innovative uses for under-used physical plant. Typically this involves designing special "option" programs, and assembling new staff and students in existing buildings. As Tye (1978) points out in reviewing recent Congressional testimony, enrollment decline also presents opportunities for program enrichment, extension of services to new populations, and reduction of school size.

Thus it is not surprising to find in a survey for the National Alternative Schools Program, as Flaxman and Homstead did, that at least 1,300 specific alternative programs (both elementary and secondary) now exist in public school districts. Several "networks" for such schools exist, and a few teacher education programs are beginning to minister to their special needs (Smith et al., 1974).

In any case, new physical plant is still being built in areas where population is expanding, notably the Sunbelt and certain rural areas. And many buildings put up in the last three decades are badly in need of modernization; wherever renovated or new facilities are being created, the opportunity to create new programs is present.

In an era of tight money, open-space school plans have proved economically attractive and have become popular as much for this reason as for "philosophical" reasons. Their users usually find that the flexibility and team planning they permit also require a substantially new type of school organization.

We should also note that the enrollment decline figures in public schools are not paralleled among independent schools. Private schools, not including parochial schools, have experienced a 51% increase in enrollment since 1971 (Cooper, 1977); new private schools are not rare.

Finally, we should note the increasing diffusion of experimental programs involving the physical dispersion of students into a variety of community learning settings (e.g., the four experience-based Career Education programs supported by NIE, which beginning in 1974 have now diffused to approximately 160 districts. Though a focused physical plant is not involved, a newly-built social system is definitely required.

So new schools, usually with innovative or alternative-like intentions, and with newly-assembled staffs and student bodies, are much more numerous than one might expect.

Difficulties with the New-School Strategy

But creating new schools does not appear to be a simple or well-understood process, or a miracle cure for what ails education. Published accounts suggest many difficulties.

High energy requirements. Nearly all accounts of new schools--especially those with an innovative mission--describe overload and stress as typical, especially in their early stages (for examples see Center for New Schools, 1975; Gross et al., 1971; Smith and Keith, 1971). As Stinchcombe (1965) has pointed out, there are many liabilities of newness, not least the fact that familiar roles and procedures which ordinarily make for economy of effort are lacking. Even experienced organization development specialists (Schmuck et al., 1975) were surprised to

see how much energy it took to create a comprehensively new organizational design for the schools they were consulting with. So the new-school strategy cannot be expected to be easy.

Failure-proneness. As one new-school planner said, "If someone wants to show that you've screwed up, they probably can--because you probably have." Careful scrutiny will always reveal that any human enterprise has fallen short of its hopes in some respect.[2] Perhaps new schools are no more likely to fail than the other change strategies we have discussed, but it is notable that there are many more failure cases in the literature than successes.

There appear to be several types of failure. Perhaps the most "natural" one is that outlined by Sarason (1972):

> ...by the end of the first year, life in the new school is remarkably similar to that in old ones: what children experience in classrooms, the quality of relationships among teachers, and between them and the principal, the relationships among parents, community and the school, the criteria by which everyone judges themselves and others--in none of these can one discern a difference that makes a difference.

Even where such complete regression to ordinariness does not occur, it is quite typical for slippages to occur between the original vision and the reality (Levin and Simon, 1973, 1974); as the case studies in Part III of this Final Report demonstrate abundantly, the vision itself may suffer erosion or even outright abandonment.

Some new schools fail not because of slippage, regression to the typical, or loss of goals, but because they are incoherently and incompetently put together (Gross, et al., 1971); the parts simply do not add up.

Finally, it sometimes occurs that new schools fail to survive at all. A substantial portion of the alternative and "free" schools created in the late 60's are missing today. In the public school sector, what may happen is that the principal and a large proportion of the staff leave for other jobs (Smith and Keith, 1971); the vision simply disappears with them and the new staff runs an "ordinary" school in the same physical plant.

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2) The quote is from Byron Stookey, cited in Carr et al., 1977. There is a sense in which almost any human action looked at from outside, and with the advantage of later knowledge, looks stupid. Case analysis usually suffers from this bias, and the reader can easily miss what participants were doing that was noble, effective, and wise.

Dissemination weakness. Even when a new school is successfully mounted, does well by children, and resembles the vision of its planners, it is not at all clear that it can serve well as a beacon of educational reform--which is usually cited as one of the reasons for embarking on the enterprise in the first place. Kritek (1976) has shown quite clearly that the need to build a cohesive staff with strong commitment to the special vision they are actualizing works against the need to be open to the immediate professional environment in ways promoting dissemination. And beyond this, a school is a complex social system that takes much art and craft to produce. It cannot be "diffused" like a specific teaching innovation--and, as we have suggested above, even that process is slow and energy-consuming (cf. Walton, 1975). So although a few schools (such as Bremer's Parkway School in Philadelphia, Montessori schools, IGE schools) have successfully replicated themselves, the process does not happen easily or quickly; the latter two examples have taken years and a strong supporting "infrastructure" for widespread dissemination.

Reasons for Difficulty in the New School Strategy

Why should these problems with the new-school strategy be so typical? We will explore this question much more fully in Chapter 3, where we develop a general conceptual framework to describe and explain the processes of planning and implementation in new schools. Here we only wish to suggest the range of possible explanations that have been given by others. That range is wide enough to confirm Sarason's assertion (1972) that the creation of new settings is both terribly complicated, and not at all well understood.

Environmental press. Some studies have invoked the idea that the failing new school never achieved legitimacy with the relevant portions of its environment (Chapman, 1975), or that environmental uncertainty and turbulence was so large as to endanger the enterprise (Biagioli, 1977).

Over-ambitiousness. New schools may fail precisely because they attempt too much (Bredo and Bredo, 1975) and opt for the "alternative of grandeur" rather than incremental change (Smith and Keith, 1971).

Internal conflict. As Sarason (1972) points out, resources are always finite, and people differ, so conflict is inevitable. New schools, especially those with an equalitarian ideology prohibiting decisive conflict resolution by a superior, often run into serious internal divisions because they lack an agreed-on conflict resolution mechanism (Cooper, 1973). DeTurk (n.d.) also stresses the strong importance of thoroughgoing team development and trust-building.

Managerial inadequacy. Gross et al.(1971), on the basis of their case study, make a strong argument for the view that managers who fail to provide subordinates (in this case teachers) with a clear vision of an innovation, do not develop needed capabilities or supply supporting materials, and do not insure that the new teaching behaviors are set in a congruent organizational frame, will run into failure. We should note

that Bailey (n.d.) and Fullan and Pomfret (1976) have sharply criticized the Gross et al. view as solely manager-centered, and as inadequately taking into account the perspective of "users" and their needs to participate in the planning and problem-solving of implementation[3] rather than be passively directed by managers.

Sarason (1972) has also commented on the "isolation" of the leader of a new setting and its attendant risks; Cooper (1973) noted administrative turnover as a serious setback.

Lack of self-correction. DeTurk (n.d.) suggests that close, corrective attention to the course of the complex actions of planning and implementation is essential; Sarason (1972) suggests the need for a self-critical vehicle for leaders and core groups in new settings.

Missing support systems. Green (1975) has cited the need for consulting assistance, adequate planning time, and protection/buffering from environmental pressures. Eastabrook et al. (1974) suggest, too, that lack of adequate planning time and preliminary training for teachers is a serious omission. This lack is especially crucial when, as in the Gross et al. (1971) and Smith and Keith (1971) cases, the school staff are not only new to the setting, but relatively inexperienced.

Non-design. Many case accounts suggest that new-school planners simply do not understand that as much attention needs to be given to "social architecture" (Perlmutter, 1965) as to the design and building of the physical plant. Even well-conceived texts on school planning (Castaldi, 1977) give little attention to this topic, and the organizational forms which appear in new schools are either taken for granted, familiar re-issues of existing role definitions and structural arrangements, or are left vague and only gradually "emerge," often in undesirable form. As we shall see, our case studies in Part III are rich in examples of this reason for new-school difficulties.

Even though all these explanations of failure are plausible, most of them are based on very small numbers of cases--often a single one. And, as we have seen, it is quite possible that even well-worked out explanations (Gross et al., Smith and Keith) can be overturned radically by other analysts using the same data. So we need better explanations. In particular, we need better explanations of success: why things work well with the new-school strategy.

The final two sections of this chapter are a brief examination of some prior work on new schools, including both descriptive accounts and

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3) Similarly, Lighthall (1973) has countered Smith and Keith's view that their failure case was explained by such matters as staff inexperience, over-ambitiousness, and unsophisticated training and start-up activities. Lighthall suggests that the managers' benevolent control of the new school was carried out through the denial of the "legitimacy and power of others' values and expectations," and that real problem-solving never occurred.

normative/prescriptive materials. We do not critique them in detail, but simply note interesting and useful features, along with limitations. We do not pretend to have covered all the literature on new schools, although it should be noted that as far as we can tell, it is not large.

Descriptive Accounts

Perhaps the most often-cited discussion of the creation of new settings is that of Sarason (1972). We have acknowledged the richness of the ideas he presents at a number of points here and in the following chapter. The generic-level ideas of the book, however, are not exemplified in a direct case account of the founding of a new school.

The most frequently cited accounts of new schools as such are those by Gross et al. (1971) and Smith and Keith (1971). The Gross et al. account is a concise description of a failed implementation of individualized education in "Cambire," an inner-city elementary school. The authors use the case to attack the "human relations" view that "resistance to change" is the primary barrier to implementation, and make a strong case for the centrality of managerial skill, as we have noted above. However, the Gross et al. study is open to equally plausible alternative interpretations. Furthermore, the surrounding bureaucratic, political and community context is largely ignored, and the time perspective limited (7 months of study).[4]

The Smith and Keith study is an extremely thorough and painstaking documentation of a failure to implement a new elementary school ("Kensington"). A great deal of direct ethnographic data are included and the authors use graphic, network-like methods to show the interaction of multiple variables in explaining outcome. There is less a sense than in the Gross et al. book that a "thesis" is being put forward to the exclusion of other interpretations. However, the account also suffers from minimal attention to the political and community context, and has a short time perspective (1 year) which precluded attention to the early planning phases, or to later implementation.[5]

The other substantial case study available is that produced by the Center for New Schools (1975) of Metro School, an experimental urban high school. It is notable for its detail, its analysis of the role of consultants, and its attention to student culture and sub-groupings; it is also one of the few studies that includes student achievement data (after 18 months). However, the documentation is somewhat uneven.

The Center for New Schools (1973) also presented what might be called "micro-cases"--accounts of 15 new alternative schools in the state of

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4) Evans Clinchy, an educational planner who visited "Cambire" school the following year, claims that considerably more implementation took place then, though the Gross et al. model would not have predicted it.

5) It is especially valuable that Smith is currently following up all the personnel from Kensington School, both to track their career paths since the case was done, and to assess durable effects of the experience on them (and on the district).

Illinois which covered about 1-2 pages each. However, as might be expected, these focused mainly on the "delivered" school rather than on the processes required to get it into place.

Biagioli (1977) developed a long case study of a new dispersed-site elementary school in a new town, where he served as participant observer. The fate of the school was still ambiguous when he completed the study (one year), and the field notes are not well tied to the rather large, uncoordinated amount of conceptual material presented.

Cooper (1973) made a comparative study (one of the few available) of seven "free schools," drawn from a larger pool of 100, adapting the framework of ideas developed by Erikson for outlining development of individuals. The ideas are fruitful (e.g., the views of member conflict, leader succession, and the importance of socializing new members), but it is hard to assess the confidence that can be placed in his conclusions from the brief account available.

Kritek (1976) describes a successful implementation of an alternative high school without walls during its first year; the key factors were staff selection, adequate planning, commitment and support from the top, and avoidance of environmental visibility.

Chapman (1975) describes a college-level alternative program in trans-disciplinary studies over the years; it is a useful account of how anti-authoritarian ideology within the staff had dysfunctional effects, leading to polarization. He also analyzes the loss of external legitimacy for an enterprise which was markedly deviant from the norms of its surroundings.

DeTurk's (n.d.) useful case history of the successes and failures of an alternative school is one of the few accounts which not only details the planning process followed, but makes prescriptive suggestions, such as the importance of continued redesign and "inflight correction."

Bredo and Bredo (1975) describe the difficulties in implementing school-wide changes in a middle-class suburban school; their explanations center largely on ambitiousness and scale, and the need for better planning, coordination, leadership, and participation, given the conflicts over goals, and teacher-administration differences that arose. Their explanations tend to combine those of Smith and Keith and Gross et al., but take more account of bureaucratic-environmental pressures on the school.

Eastabrook et al. (1974) studied the early planning stages for an experimental high school, pointing to deficiencies in planning and in training of teachers which they felt would make effective implementation unlikely. For an exhibit of what happened when adequate planning and start-up training occurred, see Fosmire et al. (1971): the social environment of the school, as assessed by student and faculty data, appeared to be quite congruent with original hopes.

Simon et al.(1973) analyzed the second year of operation of an alternative high school, largely on what might be called the "micro-level" of later implementation: the school as experienced from day to day by its inhabitants. There is little discussion of prior planning, nor of the general organizational context. The senior authors' concurrent work (Levin and Simon, 1973, 1974) conceptualizing new school planning and implementation is quite rich, however; it emphasizes the collective creation of social meaning in new settings, and the development of a "linguistic community." They thus emphasize the phenomenology of organizations, and consider the planning process to be a dialectical one swinging between "analysis and action, logos and praxis." However, the case study does not utilize the concepts very explicitly or clearly.

The story of a small alternative high school in Manhattan written by the Elizabeth Cleaners Street School (1972) is rich in personal accounts by staff and students, drawings, photographs, discussions and interviews. But it lacks any organizing framework or sense of why things worked or did not do so.

The same is generally true of Riordan's (n.d.) two brief cases.

Prescriptive Materials

Many of the descriptive accounts above also give advice to new-school planners in passing, some of which we have noted. In addition, there are a number of treatments explicitly aimed at helping the creators of new schools do a more effective job.[6)]

At one extreme, we might note the very thorough, logical, and apparently practical set of milestones for opening new schools developed by the school district of Philadelphia (Goldstein, 1972); the manual includes suggestions and steps relative to a wide range of tasks, including the development of educational program guidelines and evoking community participation. It is not wholly clear how directly derived from (or congruent with) practice the material is, even though it is true that Philadelphia, partly as a result of its Affective Education program, has opened a substantial number of interesting alternative schools.

At the other extreme, we might cite the informal, non-linear suggestions by Rasberry (1970), and Rasberry and Greenway (1972); they are clearly close to the reality that these creators of alternative schools had experienced, but are much less systematic and thorough than manuals like Goldstein's.

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6) We might note that though a number of planning guides for existing schools are available (e.g., Temkin et al.) they are primarily aimed at improving existing operations, making them more systematic, etc. and offer no real guidance for the development of a new social organization.

Fortunately, the user need not choose at either extreme: the very straightforward "practical guide to starting and operating a community school" by Arons et al. (1973), which contains case material from four schools, provides a range of planning options and concrete suggestions on issues from goal-setting to fund-raising, curriculum development and governance. Similarly, Taylor and Carra (1974) studied and compared four alternative schools, developed a prescriptive planning model and tested it against what actually occurred. The model, which included such items as the importance of specifying organizing, coordinating and consulting roles and dividing work into recognizable phases, was quite well supported in the formal and informal planning practice of the schools they studied.

We should also note here the chapter in DeTurk (n.d.) devoted to school planning; the treatment emphasizes adaptive, continuous planning with attention to affective as well as instrumental decisions. Samoff and Barbour (1974) also describe charrette methods of intensive planning which include parents and children.

These illustrative materials are strongest where they are derived from repeated or multiple case experience, and have a reasonably clear set of organizing ideas underlying them. Their weaknesses seem to be (a) the assumption that advice in written form will be easily or naturally followed by planners; (b) minimal attention to the local district bureaucratic/political environment; (c) weak coverage of the range of social-architectural issues involved in envisioning, designing, starting up, and "fine tuning" the social system of a new school. Our project's intent was not only to study the creation of new schools carefully, but to develop learning materials that would not suffer from such weaknesses. The reader should look at the guides in Part V of this Final Report to see how well our intentions have been achieved.

This concludes our discussion of issues surrounding the use of the new-school strategy for educational improvement. The next chapter turns to the general framework of ideas which we developed to organize the welter of processes and events we were studying.

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Final Report

Part I: Introduction

Chapter 3

PLANNING AND IMPLEMENTING NEW SCHOOLS: A GENERAL FRAMEWORK

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Chapter 3

PLANNING AND IMPLEMENTING NEW SCHOOLS: A GENERAL FRAMEWORK

Matthew B. Miles

What are the key ideas underlying the study we undertook? The reader deserves as crisp an idea as possible of these. Then he or she can judge whether they really are "key" in organizing and explaining the events and processes which we document in the case studies of Part III--or conclude that alternative explanations might be more fruitful.

Our wish to be coherent at this point must not delude the reader into believing that the ideas began at this level of clarity. The reality was that they only emerged gradually over three years of work. Thus this chapter begins with a short historical overview of how our labels and beliefs about the planning and implementation of new schools shifted over time, and gradually became formed into a general framework of concepts.

Following this, we discuss the substance of this "emerged" framework by reviewing the sorts of inquiry we went through on the way to it. We begin with our basic definitions of "planning" and "implementation," then move to the question of what the outcomes of "good" planning and implementation might look like.

Following this, we suggest what some of the causes or determinants of these outcomes might be. These include what we have called "core" or essential features of the planning/implementation enterprise, which generate a series of six "primary tasks," such as "political stabilization" or "vision development" (evolving a coherent picture of what is intended). Planners and implementers must give sustained attention to these tasks, or risk failure in the enterprise.

Helpful comments and suggestions on this chapter were made by Howell Baum, Lee Bolman, Gene Hall, Bunty Ketcham, Hans Knip, Bert Kuypers, Gordon Mackenzie, Tom Popkewitz, Roger Simon, Julie Stulac, Rein van der Vegt, and Jolene Vrchota. Project staff members Sam Sieber, Beverly Taylor, David Wilder, Ellen Sullivan and Barry Gold also contributed a great deal to revision efforts.

We noted early in our research that those creating new schools also faced a series of characteristic dilemmas (such as the tension between staying innovative and going traditional). These dilemmas arise from the interaction among the core features of what is being attempted and forces from the surrounding context of American public education. We review each of eight such dilemmas, illustrating them with data from our sites.

Finally, noticing that groups involved in planning and implementation seemed to have more or less skill at coping with their primary tasks and dilemmas, we began to isolate a set of six process variables or "capabilities," such as decision-making skill or "reflexiveness" (the ability to use the results of actions to guide further action) which seemed crucial for planning/implementation effectiveness. Each of these is in turn illustrated with case examples, so that the finally-described general framework is grounded in our experience with new schools.

The pieces of this framework are sketched below in Figure 1. In brief, the essential features of the enterprise, along with forces from the surrounding context, generate both a set of primary tasks, and a series of key dilemmas. These tasks and dilemmas are basic input for the group most concerned at any given time with planning and implementation (P/I group). How well they are coped with is a function of P/I group capabilities, which generate decisions and actions leading to more or less successful P/I outcomes.

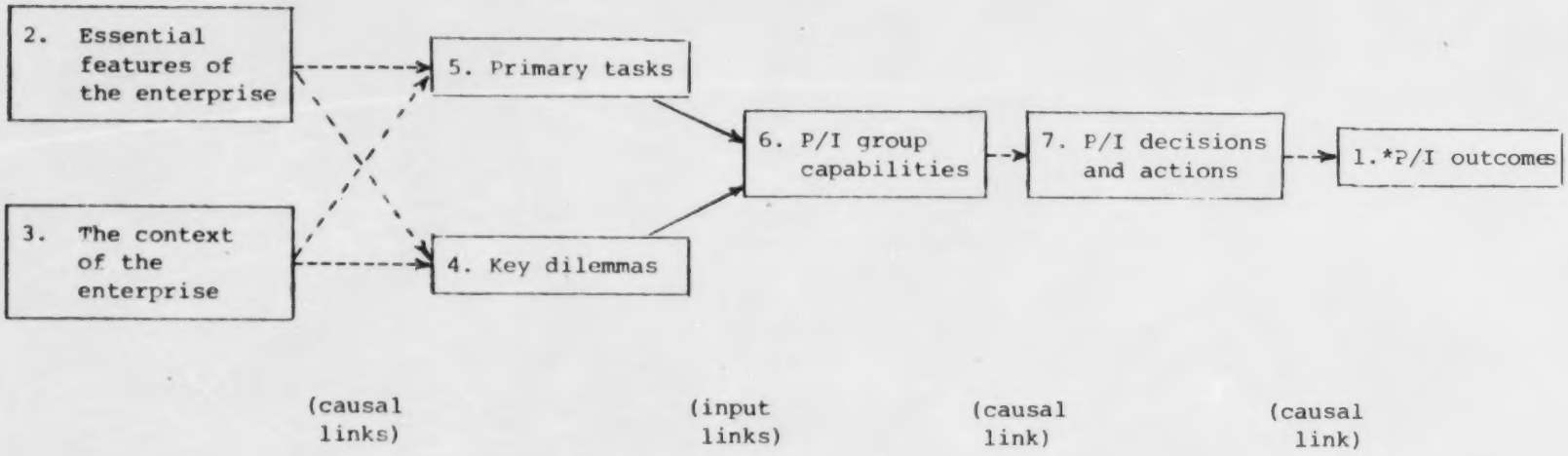
This overview, while it may superficially meet the dictum of "tell them what you're going to tell them," is clearly only a curtain-raiser. On to the story.

Conceptual Development During the Project

During the early stages of this study, we faced at least two intellectual dilemmas. First, as we have seen, there are few available studies that examine the problem of creating new schools in any systematic way. Thus, we were faced with the choice of either creating a conceptual framework on essentially de novo terms--a simultaneously attractive and frightening option--or borrowing vigorously from areas and fields which on the face of it seemed to have relevance. Since as a minimum, the useful domains seem to include (at least) planning theory, organization design (and organization theory more generally), small-group dynamics, the broad domain of "planned change," certain aspects of the sociology and politics of education and theories of organizational and educational innovation, the second horn of the dilemma seemed just as interesting and anxiety-provoking as the first. At any rate, since science is supposed to be cumulative, we opted for borrowing, and did so eclectically as it suited our purposes, with little respect for disciplinary boundaries.

Figure 1

FRAMEWORK FOR CONCEPTUALIZING PLANNING AND IMPLEMENTATION



*Numbers refer to the sequence of these topics in the remainder of the chapter.

A second (and indeed, prior) dilemma, to which we repeatedly returned, was whether to pre-specify an intellectual framework, or to "ground" our theory in our field work as the study proceeded. The dilemma is perhaps more apparent than real, since no investigator ever starts with a blank slate, and even the most determined testers of a priori hypotheses seem to revise or bend their ideas as data come in. In our case, we began with a general kind of accounting scheme (factors we thought might influence planning and implementation decisions), and bent/revised this fairly steadily as the work continued and our sites taught us more about "reality." (For an idea of what this looked like, refer to Appendix A, Influences on Decision-Making, produced about four months into the project, in October of 1974.)

At that point, we were focused on trying to account for the main classes of influence over planning and implementation decisions, ranging from immediate bureaucratic and community pressures to the hopes and planning strategies of those charged with envisioning and bringing the new school into being. We expected, for example, that planners might have a set of "desired system properties" (aspects of the new school) which would drive their decisions; these would generate implementation actions and a resultant set of "actual system properties" which would more or less resemble the original hopes. The implicit view on our part was that a fair amount of rationality was involved.

An associated accounting scheme, also developed early in the project, was a list of "system properties" (Appendix B). These properties could not only be seen as applying to the content (and results) of the P/I group's efforts as they worked on the new school, but indeed were useful descriptors for the social system of the P/I group itself. They were organized in a systems-theory framework, and included inputs (for example, resources, clients), transformation system variables (ex: formal structure, psycho-social system, technology and managerial behavior), and outputs (ex: changes in students, community services, products). We were also very much interested in change and renewal methods that might become durable features of the new school.

From the start of the project, we had expected to study our sites not only through ongoing non-participant observation, but through occasional intensive questionnaires to study "the state of the system." So this list was extremely useful as a reminder of what we ought to be attending to.

As we got more and more deeply involved with the five new-school sites we were studying, our list of variables got longer, with the additions grounded in the reality of what we were seeing, and were being surprised by (such as the fact that many important "decisions" seemed to flash by in seconds, or that "rationality" turned out to include many non-rational features, or that political motives were implicit in much planner/implementer behavior).

So our observations led to the creation (and steady expansion) of three new lists, one with key actors on the planning/implementation scene (such as administrator, consultant, principal); one with planning/implementation processes (such as commitment, influence, policy-making) and one

with planning/implementation content aspects of the school being planned, such as budget, time use, goals, norms). Essentially, we wanted to cover the waterfront as fully as we knew how. Our early field contacts naturally served to expand and elaborate these lists considerably; the actor list after 8 months' work had 52 items, and there were 76 process and 73 content items.[1)]

Not surprisingly, after a year more of field work, we revised these lists into a revised coding scheme of 24"themes" or major issues that we had come to feel were important as we watched the people in our sites at work on the task of envisioning and creating a new school.[2)] By this time we had focused on five different aspects of planning/implementation styles, (such as adaptiveness and time management); eleven aspects of the planners and/or implementers as a social system (such as task orientation, conflict management, division of labor); and eight aspects of planners'/implementers' relations with their environment (such as initiative, knowledge-seeking, and political skill). We continued to look carefully at the behavior of certain key actors: our researchers themselves, the formal leader of the new-school enterprise, and any consultants involved.

A major shift in our attention took place during the first year of field work. We reduced our initially strong focus on the small-group and "rational planning" aspects of creating new schools. We came to look more intensively at the environment of planners, and the bureaucratic, political/strategic and financial issues they had to negotiate. Our sites had taught us that they, and we, needed to look outward, as much as inward to the technical content of their planning and implementation tasks.

It should be noted that our original intent had been to code all our field contacts using the initial and/or revised coding schemes, so that during analysis we could easily retrieve excerpts from field notes; we developed several successive versions of a method of coding segments of the field notes, and posting these on file cards. But we found that the ongoing demands of field work always pushed coding to a lower priority, so that large coding lags developed. And we only belatedly realized that the usefulness of developing and revising coding schemes lay not in the availability of "coded" data segments, but in our development of a growing, common set of concepts which were clear to us, were grounded in both our earlier conceptualization and our field contacts, and could be used to organize continuing data collection and analysis.

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1) For copies of the April, 1975 coding lists, and a "Lexicon" developed in August of 1975 defining key terms, see the Appendices to Chapter 5, Research Methods, Part II of this Final Report.

2) The revised coding scheme, and the "New Lexicon" defining its terms, also appear in Appendices to Chapter 5, Part II .

Finally, as we entered the third year of the study, we began to develop a semi-final version of what we had come to consider most important or salient in the way of key concepts, organizing these into a general framework. We proceeded in an essentially disorderly way, along several fronts. One approach involved conceptualizing the unique or essential properties of the sort of social system we were studying (new schools in the process of becoming embedded in the American public school setting), and mapping these into a "flow model" showing their influence on each other. We also reviewed our earlier sets of "themes" for what seemed most crucial. And we began to specify what we would now regard as key "dependent variables"--outcomes of the planning/implementation process.

The result of all this clarifying and winnowing was a simplified framework, whose outlines have been sketched above in Figure 1. We have used it to organize the case studies presented in Part III of this report. The framework is not genuinely explanatory or predictive, and cannot be called a "model," but it does identify variables we regard as important, and as present in greater or lesser degrees in all our sites. As the reader will see, each site presents a configuration of these variables that is idiosyncratic--and has some features not present in other sites. But we do regard these variables as useful descriptors, across all of our cases.[3] We are far short of a framework that can (a) explain clearly and fully just why implementation of new schools succeeds or fails in any particular case, or (b) prescribe confidently just what one should do to be successful in a particular planning/implementation situation. But we have the sense that the framework includes the right things to be looking at, which is something more than half the battle.

That the framework is potentially useful for explanatory/prescriptive purposes is underlined by our experience with the planning guides which form Part V of this report. They used the framework directly as a basis for reading material and experiential exercises that would be of help to people planning and implementing new schools: feedback from users of the guides so far has been very positive.[4]

Our intellectual progress during the four years of the study has thus been from initial a priori list-making, through expansion/extension of lists as a result of field work, to simplification and selection of variables, again grounded in our observations, and to development of an interconnected framework of variables. Our striving for coherence was arduous, conflictful, and only gradually parsimonious; our best judgment as of now is that the

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3) The reader with curiosity about the substance of the framework can refer forward to Figure 3, p. 98, for an overview.

4) The basic ideas were also utilized in the development of a resource book to assist staffs of new educational projects, Mapping Teacher Corps Projects (Taylor, Sullivan and Dollar, 1978); user feedback on it has also underlined the usefulness of the framework.

framework adequately represents what we have learned without oversimplifying or force-fitting the brute facts of our field notes, documents, and questionnaires. In the remainder of this chapter, we present the pieces of the framework as clearly as possible, with illustrations, so the reader can assess its usefulness.

In short, we have tried to be rational about a process that is not very rational. We do not claim that planners and implementers of new schools "ought" to be more systematic and thoughtful than they in fact are. But we as researchers do want to be as clear as we can in thinking about what seems to be going on.

The Conceptual Framework

References to Figure 1 will help the reader see the flow of this section: it begins with our definitions of planning/implementation outcomes, then moves to the question of determinants of these outcomes: the essential features of the enterprise and its context in American public education; the "primary tasks" and dilemmas of the P/I group; and the key process variables or capabilities which lead to decisions and actions that determine effective outcomes.

Planning/Implementation Outcomes

New schools as the context. Our focus in studying planning and implementation was on new schools. "New" has several meanings, to which we will return shortly. Here it should be emphasized that we mean a total school program (not a minor project, a course, or other innovation) which is created more or less de novo (is not simply tinkering with an existing school) and which its creators experience as different from their own past practice.[5] The new school may or may not be housed in a new building: the issue for us is the social, not the physical architecture (though the latter, of course, may influence the former).

Definitions. "Planning" and "implementation" are both activities intended to induce a desired future state of affairs, and cannot be easily separated. Most people would agree that "planning" is devoted to activities such as forecasting, envisioning the future, constructing verbal or graphic pictures of a desired aspect of that future, and specifying possible steps toward that aspect--and that "implementation" requires the taking of action on the real and present world in order to shift it toward the desired aspect. But we agree with Friedmann (1969) that "the idea that planning and implementation are two distinct and separable activities dies hard"; the two activities are usually inextricably intermixed in reality.

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5) As we shall see, the substantial redesign of a total school program (as in our Westgate case study) qualifies as a "creation" in the sense we mean.

For our purposes, we more or less arbitrarily considered that "planning" of a new school begins when someone decides that the new school should exist, and a legitimate body charged with designing the school starts work.

Naturally, "planning" does not stop when the school opens for students; it continues in parallel with "implementation," which in our terms, begins as soon as a manager for the new school is appointed, with the right to spend money.[6] Subsequent implementation actions include such things as selecting staff and students, actualizing the design for the school, opening for students (start-up), and early operation.

Both planning and implementation continue indefinitely, as far as we can see, although at some point (usually from six months to a couple of years after opening), most participants tend to agree that the school has "settled down" and does not need further major adjustments. By that time, planning and implementation functions have receded to become a minor part of the life of the school, which can be said to have become institutionalized, and is operating as a more or less steady-state system.

We have used the term "planning/implementation group" (P/I group) to refer to whatever subsystem is most responsible for the enterprise at any given point in time: it may include an initial planning committee, principal and key assistants, principal and the total faculty, etc., depending on the site involved and the stage of work. "P/I group" is thus an elastic term, with different meanings in different sites, at different stages of the effort.

What is "good" planning and implementation? We had to face the question of what we would regard as the major outcomes of planning and implementation efforts--dependent variables defined in such a way that we could specify better and worse results. What can we consider P/I "success"?

First, we identified four markers of good planning and implementation that could be noted along the way, during the process of P/I work: these might be seen as intermediate outcomes. They include:

1. Adequacy of obtained financial resources. It seems inescapably and perhaps tautologically true that a new school, to be successful, must have enough money to support planning and implementation efforts--not to mention routine operations.

2. Environmental endorsement. Since P/I groups exist in a bureaucratic, social, and professional environment, it is difficult to define their work as "successful" if salient pieces of that environment do not approve of the decisions being made. If persons and

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6) In the case where the new school involves the construction of a new building, it could as easily be argued that "implementation" begins when the basic funding decision (bond issue, etc.) has been made. However, since not all of our sites involved new buildings, and since we are primarily interested in social rather than physical architecture, the later marker point seems most sensible. That is, implementation begins when a new school's manager has the right to take action on the real world in the name of the school.

groups in a position to support or block the planning effort are basically favorable toward the P/I group, and to the concept of the new school being developed and actualized, then we have another intermediate outcome of some importance. Without it, the risk is that P/I efforts can be blocked or thwarted.

Such endorsement, though it is not the same thing as financial support (note, later, for example, the difficulties faced by our Lincoln Acres site, where money was assured, but parents vigorously attacked the plans and actions of the faculty), may well have back effects on the adequacy of financial resources.

3. Quality of planning/implementation decisions. Dozens, even hundreds of decisions are made as a new school is designed and actualized. The "goodness" of such decisions is a slippery concept, and many criteria can be applied: Were all the available facts and information used? Would experts applaud the decision? Is it congruent with the planners' goals and hopes? Would most competent observers consider that the decision is implementable? Will undesired outcomes of the decision be minimal when it is carried out? More positively, will the decision "work well" when carried out? We settle for the idea that stakeholders (and observers) would concur that the decision is "good," technically "right."

4. Ownership of planning/implementation decisions. Since planning new schools is a complicated, even chancy process, often without much clarity or certainty, and since the implementation of planning decisions presents a thicket of unforeseen issues, it seems to be important that the decisions have commitment behind them. Key planners (and later, implementers) need to believe in their decisions; otherwise these decisions can too easily be set aside, walked away from, or unendingly re-made.[10]

These four intermediate outcomes, noted during planning/implementation efforts, might be seen as necessary prerequisites for P/I outcomes seen in a more ultimate, "bottom line" sense. Here we can identify four main subvariables, adding up to planning/implementation success, once the school is operating.

1. Congruence with goals. First, the implemented school should have features which are reasonably congruent with the essential or core goals which planners had for the school. Much adaptation and shifting usually--often desirably--occurs along the way (Berman & McLaughlin, 1974) but good implementation should protect the original vision, not betray it or abandon it. The unanticipated

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10) This discussion follows the distinction made in much of the literature on small group decision-making (Collins and Guetzkow, 1964). Note that quality and ownership are jointly-needed: a high-quality decision not owned (accepted) will run into implementation problems; a highly owned decision will run into trouble when implemented if it is technically poor.

outcomes of the P/I process, which will never be zero in number, should not conflict with what might be called the "meta-goals" (central or essential hopes) for the school.[11]

2. Problem-coping ability. Second, since any new school will have problems (situations which are "out of program" and require corrective or inventive action by implementers), good implementation should show us a school able to cope with problems--so that they get solved with reasonable energy expenditures and do not recur. To put it another way, we can say that all efforts to plan a new school have unanticipated consequences. How effectively these consequences are dealt with may be as important as whether "goal-congruent" implementation has occurred.[12]

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11) As Simon (unpublished) has pointed out, making this assessment is not simple: researchers and P/I group members may legitimately disagree over whether the core vision has been perverted. Our case studies show several very clear instances of such disagreement.

Furthermore, Simon suggests, the opportunities for slippage are very great; the P/I group must successively (a) specify and negotiate its ideals; (b) plan how to translate these ideals into reality (that is, set up rules and procedures for life in the school as an organization); (c) develop some means of controlling or sanctioning behavior as rules and procedures are applied; (d) develop some means of assessing reflexively whether the rules (and sanctions) are in fact a good exemplification of the original ideals. In the process, a P/I group might well find that ideals (in our terms, part of the original vision) need to be renegotiated. So, would we call a school whose planners had abandoned an original hope a "successful implementation"? There seems no crisp answer to this question: we invoke again the idea that "core" ideals should not be betrayed, especially if it seems clear to the researcher and the P/I group that they could have been actualized (that is, were not "unrealistic").

Sieber of our project has noted:

> Even a failure in terms of ostensible goals can be a positive outcome--it can keep people from making the same mistakes elsewhere, it can represent a realistic adjustment to a situation (the enterprise may not have been needed), or it can be converted into a "heroic effort" with benefits for the staff's reputation, and so on.

12) The reader who is familiar with the literature on educational innovation will note that the "goal-congruence" criterion is quite similar to the "fidelity perspective" (Fullan and Pomfret, 1977), in which the success of an innovation is judged by whether it is implemented as its developers/planners intended. The "problem-coping" criterion is similar to Fullan and Pomfret's "process perspective," in which the nature of what happens during implementation is more crucial than "fidelity."

3. Stakeholder satisfaction. Third, in good implementation efforts, we should note stakeholder satisfaction: key figures related to the new school feel reasonably good, believe that the enterprise has achieved (and is achieving) things important to them and their constitutencies. While "environmental endorsement" refers to support of the P/I enterprise as an intermediate outcome, stakeholder satisfaction is more ultimate: what has P/I work accomplished, as seen by stakeholders?

Since stakeholders are diverse, we cannot demand uniformly high levels of satisfaction. But in the presence of significant dissatisfaction from parents, or students, or teachers, or Board members, when they are asked how they feel about the school, we would have to conclude that planning and implementation had been less than successful.[13]

4. Goal achievement. Finally, for good planning and implementation, we should be able to note that the implemented vision does in fact accomplish what it is supposed to: enhance pupil self-esteem, serve as a beacon of change for other schools in the district, provide certain community services, etc. This might be seen as a criterion of "objective success"--one which is often given short shrift because educational outcomes are diffuse, difficult to measure, and so on, but one we cannot ignore.[14]

Our working definition is that all four of these components must be present for implementation to be considered "good," "successful"; if the new school has lost the original vision (not just minor aspects of it), or is floundering or overwhelmed with current problems, or has dissatisfied stakeholders, or is clearly not achieving its hoped-for goals, we are seeing an implementation failure of some degree.

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13) In studying the implementation of Federal programs aimed at local school improvement, Berman and McLaughlin (1976) found that "mutual adaptation" characterized successful programs: both the program as originally envisioned, and the local school district changed during the process. If such mutual adaptation occurred during new-school implementation, we might expect (a) better problem-coping, since the new school and its environment are mutually influencing each other; (b) more stakeholder satisfaction, if the mutual influence led to a wider range of acceptable outcomes.

14) There are some value-laden questions here which are beyond the scope of this discussion. One is the general one of significance: what was the worth of it all? A vision might be congruently and satisfyingly implemented in a school which continued to cope well while achieving its goals--but those goals might be essentially trivial, piddling, hardly worth anyone's attention.

For another, a school might do well on all four dimensions of P/I success but be devoted to ethically dubious goals. Fagin's school for thieves is easy enough to cite, but depending on one's larger value framework, one might applaud or condemn, say, schools for CIA agents,

(cont'd)

We might make one last comment about the idea of "implementation success." It is focused on strongly here because we wished to know how human beings wish and dream about educational environments, and what happens along the way to the actualization or dissipation of their dreams. This focus does not rule out several other very real ways of viewing the creation of new schools,[15] including the idea that they serve latent functions, such as career advancement for their planners and implementers, or sheer boredom reduction; the idea that new schools are not so much goal-directed operations as a sort of arena or theater for the expression of cultural conflicts; and the idea that new schools are simply an expression of innovation for its own sake, an efflorescence of a rootless, steadily "modernizing" society. We expect ourselves, and the reader, to stay alert to data consistent with these alternate views, even as we examine the "success" of planning and implementation in the terms we have described.

In the remainder of this chapter, we turn to the basic question of what might be the determinants or causes of P/I success or failure. They are reviewed in Figure 1 (p.3) and range from basic "background" factors such as the essential nature of the enterprise and its context, which generate certain primary tasks and dilemmas,[16] to the capabilities present in the P/I group as they deal with the tasks and dilemmas.

Essential Features of the Enterprise

The social system we are studying in this book involves the creation of whole new, innovative schools, within school districts. Table 1 reviews these features, the problems they cause, and the needs they create.

A whole school. The fact that a whole school (rather than the introduction of a specific innovation such as a textbook) is involved, makes for a good deal of task complexity for planners and implementers, and requires substantial financial resources. The task at hand is a formidable one: thus, a good deal of expert knowledge must be mustered, and the P/I group

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(cont'd) for American Nazi sympathizers, "free children," or blacks as such. Or one might applaud or condemn schools which use particular methods, such as behavior modification, rote learning, or "letting kids do their thing."

In our study, we tended to de-emphasize value and ideological issues of this sort by choosing to study schools built around (to us) significant and acceptable goals, and then to judge planning/implementation success by asking whether these goals were achieved, and how people acted and felt about their work. That stance is, of course, a decisive value position in itself.

15) These suggestions were originally made by David Cohen at the Symposium on Case Studies on the Creation of New Schools, sponsored by our project at the American Educational Research Association meetings, 1977.

16) We are much indebted to Sam Sieber for this way of thinking about the problem.

must be powerful enough to obtain the money needed.[17)]

TABLE 1

ESSENTIAL FEATURES OF THE ENTERPRISE

ESSENTIAL FEATURE	PROBLEMS	NEEDS
Whole school	Task complexity Substantial resources required	Expert knowledge Power
A subsystem of district	Competition for resources Constraints from district	Political skill
New, innovative	Uncertainty Lack of needed skills Opposition from traditional parts of system	Courage Reduction techniques Political skill Energy investment
Will be implemented	Planner/implementer gaps Changing conditions	Linkage Flexibility/adaptation

17) The fact that whole schools were involved also made for an intellectual problem for us as researchers. Though there is a large body of literature on planning and managing educational innovation (Miles, 1964; Havelock, et al., 1969; Zaltman, Florio & Sikorski, 1977), the great majority of what is known deals with innovation in educational organizations, not innovation of a complete educational organization. This is not a minor distinction. Though we have tried to be mindful of the range of propositions in this literature, we have remained skeptical whether ideas about part-innovation necessarily apply when a whole system is being created. Some do seem relevant, and we cite them as we proceed.

A subsystem of the local district. The schools we studied were not freestanding, but were embedded in a local public school district. Thus they automatically had to compete for limited resources with other schools and programs, and had to deal with a wide variety of bureaucratic constraints --rules, regulations, approved ways of doing things. These problems place a premium on political skill--the ability to fight for and obtain resources within, around, and in spite of the rules of the game, against or with the other players.

The local district also includes a surrounding community populated by parents and other citizens, usually with characteristic sets of values and ideologies about education, which set the stage for conflicts over various aspects of the emerging new schools. Here too, political skill is crucial to maximize endorsement for the enterprise.

Innovative. The schools we studied were not only new (in the sense that they did not exist until they were brought into being), but they were to a greater or lesser degree different from past versions of schools in these districts. This was our definition of "innovative,"[18] one which implicitly emphasized the fact that the P/I group would naturally be facing certain problems. For example, uncertainty would be considerably higher, and many skills needed would by definition be lacking, since something new and different was being attempted. In addition, the P/I group could expect opposition to their efforts from more traditionally-oriented parts of their environment.

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18) The question of "what is innovative?" plagued us steadily throughout the project. We knew that we did not want to study "cookie-cutter" schools--which could, so to speak, be stamped out routinely from existing molds--becausw ew would see little of "social architecture," but mostly routine assembly of the well-known. Yet even though the schools we studied were not really radical or unusual, not strongly "alternative" to existing educational practice, they were new and different departures for their immediate environments. That is, their planners and implementers defined them as innovative primarily because they were "new and different for us"--that is, had not been attempted in these forms locally before.

It is fair to say that none of our sites was seen by its planners as basically "innovative" for the general field of schooling (in the sense, say, that Neill's Summerhill, or Bremer's Parkway School, or Montessori's first school, were at the time of their creation). Instead, our P/I groups were attempting a local, novel, adaptation of school forms and practices which were more or less available, professionally known in the larger educational environment. Even with this more modest definition of "innovative," however, planning and implementation proved difficult and stressful in many of our sites. Creating the new and different is always taxing--and many external forces are arrayed against any enterprise seen as deviant, non-conforming, and risky.

These problems would create, we believed, certain needs--not only for courage in facing the unknown, and for surmounting opposition, but for political skill, techniques for reducing uncertainty, and extra investment of energy (which, as Stinchcombe (1965) has suggested, is always required in innovative enterprises.) The "economy of effort" of the familiar is missing. New roles and procedures have to be constructed, and people must learn them through training and socialization; habit is not enough. Once again; we were studying developing, rather than fully-developed organizations. We could expect to see a good deal of stress and difficulty.

Actual implementation. The schools we studied were intended to be actualized, to appear, to be created; their creators were not engaging in an abstract planning exercise. In addition, the processes of implementation took place at different times, and were often carried out by different personnel than was the case for planning. Thus, certain problems would inevitably appear: the existence of gaps between planners and implementers, and the fact that surrounding conditions could change considerably over the life of the project. These problems created needs for careful linkage between planning and implementation, and for flexibility and adaptation as the P/I enterprise continued.

The Context of the Enterprise

The processes we studied were taking place in a larger, historically given context: American public schools. Certain features of this context serve, we believe, both to provide energy for and to constrain innovative efforts. These features are summarized in Table 2.

Goal diffuseness. Educational goals, in general,[19] tend to be vaguely and diffusely articulated, difficult to measure well both in the short run and the long, and are "loosely coupled" (Weick, 1976; see also footnote 31, p.75) to educational procedures. The fact that efforts to correct these problems (e.g., the "behavioral objectives" movement) only seem to make life in schools more complicated is evidence for the idea that goal diffuseness is probably inherently more likely in "people-processing"--as contrasted with "thing-making" or "money-accumulating"--enterprises. Goal diffuseness in education naturally encourages goal diffuseness in the planning of any particular new school. It also does a good deal to heighten the base rate of uncertainty--which as we have suggested above, is increased considerably when the intent is innovative.

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19) We will not give citations for the separate points made, but simply indicate here that the relevant prior analyses we drew on were those of Miles (1967, 1977); Miles and Schmuck (1971); Bidwell (1965); and Sieber (1968). The reader may wish to compare this analysis with that of Morrish (1976), who reaches similar conclusions.

TABLE 2

THE CONTEXT: AMERICAN PUBLIC EDUCATION

CONTEXTUAL FEATURE	EFFECTS
Goal diffuseness	Promotes diffuseness in goals for school Heightens uncertainty
People-processing mission	Induces tendency toward control of students Batch processing emphasized
Structural constraints	Constrain use of innovative procedures Force for choice of traditional practices
Professionalism	Commitment to goals. Goal conflict. Protection of vested interests of role Energy investment.
Weak knowledge base of education	Unawareness of needed skills Minimization of expertise Inadequate mapping of planning/implementati task Reliance on traditional forms, myths
"Domestication" (ownership by public)	Guaranteed survival Non-competition for students (guaranteed clientele) Legitimacy of community pressure pro or co innovation
Permeability to environment	Vulnerability when district or local bureaucracy is hostile

People-processing mission. The fact that schools exist for (among other purposes) bringing about change in persons has certain important effects. First, schools depend very much on pupil behavior for the achievement of their purposes,[20] and given the fact that they are managed by adults with more knowledge, status, and coercive power than children, tend to drift toward authoritarian, controlling modes of "insuring" that pupil behavior will be appropriate and productive. Second, there is a tendency to use collective, "batch-processing" modes of teaching/learning, since there are characteristically large numbers of pupils in comparison with the available numbers of teachers (in contrast, say, with the situation in psychotherapy). Thus, there are steady pressures away from individualization (a feature important to the planners in most of our sites).

These pressures, which are primarily driven by adult-child status differences and the presence of many more children than adults, also have historical roots in American education. The large expansion of public education occurred when there was a need to socialize large numbers of immigrants into the industrial system at minimal costs. The Lancasterian system of rote learning for "underprivileged" pupils which was advocated in the United States beginning in 1818 required only a few teachers, since older students were used as "monitors" for groups of younger students. It was indeed a factory-like mode for processing people, and may well have influenced subsequent thinking about how schools should be organized.

Structural constraints from the macrosystem. The schools we were studying existed in a much larger system, "American education," with many structural features serving to restrict innovation.[21] At the formal level, these include federal, state and local laws and regulations, courts with jurisdiction over schooling, union regulations, and indeed the relatively centralized, bureaucratized structure of 16,000 "locally controlled" school districts.

But many less-formal structures also restrict innovation considerably, including standardized tests and examinations; accreditation procedures for teachers and school systems; standardized texts and materials; and standardized teacher training programs. Without such features, it would be hard to cope with the high rates of teacher and student mobility in America, to link the various levels of the educational system, or indeed, to know with any clarity what our educational system is accomplishing.

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20) Cf. Wilder and Sieber (1974): "The processing of human beings is quite a different matter from the processing of things. Human beings can talk back, they can remain impervious to influence, they can defy reliable prediction of the outcomes of processing, they can evoke responses in the "processors" which are irrelevant and even detrimental to the task at hand, and they have identities outside of the organization. Further, people have a way of banding together to solve common status problems. (p. 149)

21) This analysis draws from Wayland (1964), and Miles (1977).

So though the educational macrosystem is supposedly "decentralized," it is in practical fact highly constrained on a de facto basis, and arguments about "local control" vs. regional, state or federal control have less substance than their frequency would lead one to believe. All in all, these structural features, both formal and less formal, tend to constrain innovative educational procedures in new schools, and to make it more likely that known, familiar, standard approaches will be chosen when P/I groups are envisioning and creating a new school. Unusual or alternative schools will keep encountering both direct and subtle pressures toward ordinariness: a particularly creative but non-certified teacher cannot be hired; parents request letter grades because they believe college admissions demand it; the principal feels uneasy when the reading test scores are six months down compared to other schools in the district.

And while innovative educational practices may get generated in other parts of the macrosystem, the linkages across schools, and between schools and producers of educational research and development, are poorly developed, so that new ideas do not travel easily.

Professionalism. The schools we studied were staffed by people defining themselves as professionals.[22] Professionals are classically defined as working from an expert body of knowledge, guided by some underlying ethical principles, and controlling entry to their ranks via specialized training. Professionals' expertness also implies a certain amount of autonomy and judgment in the exercise of competence.

Professionalism, we believe, tends to increase the commitment of teachers to the goals defined for new schools they teach in, their protection of each other's autonomy in the classroom, and their energy investment (a professional is one who will go the extra mile when the client's needs dictate it). But this very commitment also heightens the possibility of goal conflict, since the knowledge base for educational practice does not permit, in most cases, unequivocal statements about the nature of "good" practice. And professionalism (along with unionization) also carries with it the tendency to protect vested interests attached to the role: thus we might expect teachers to resist new roles, working structures, and procedures which threaten their prerogatives (such as the right to leave school at 3:30 when children do).

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22) The relatively short history of professionalization of education in America (e.g., the first graduate school did not appear until the turn of the century) and the relatively weak knowledge base (see below) has sometimes led observers to label education a "pseudo-profession" or sub-profession. It also seems likely that teacher unionization, originally aimed at protecting teachers' rights, may in fact serve to restrict teacher discretion in decision-making and increase external accountability along with "employee orientation." Thus, though teachers may staunchly define themselves as expert professionals, there are often grounds for doubt: citizens may question the legitimacy of supposedly "professional" decisions, and administrators may treat teachers as less capable subordinates.

Weak knowledge base. Although educational research and development has mushroomed in the past two decades (National Council on Educational Research, 1977) it is also fair to say that a great deal of ambiguity exists about just what sorts of educational intervention will lead to which outcomes. Stephens (1967) has reviewed a range of studies suggesting that educational methods are only marginally different from each other; a number of reviews (Gordon & Wilkerson, 1966; Wargo, 1972; Berman and McLaughlin, 1974) conclude that some large-scale efforts to improve educational delivery (e.g., compensatory education, Title I, Head Start) have showed little impact.[23]

Even if one argues that the knowledge base for education is in fact more substantial than suggested above, given the vast amounts of material stored in ERIC, and the existence of large collections of tested educational products (NIE, 1976), it remains true that there are great difficulties in knowledge dissemination and utilization: educational practitioners do not, for many reasons, really have a working connection to available knowledge about educational processes.[24] Thus, there is a kind of de facto weakness in the available knowledge base as far as local teachers and administrators are concerned.

This weakness has some important consequences for planning and implementation of new schools. First, it makes it more unlikely that P/I group members will in fact be aware of the skills and knowledge they need; they may not know that they do not know. Second, we can expect a minimization of expertise, the belief that "no one knows the answers, so we might as well get on with it ourselves." So P/I group members will be likely to have a rather limited, inadequate mapping of the nature, dimensions and extent of the planning and implementation tasks in which they are engaged. We would also expect, given an actual or perceived weakness in the knowledge base, that educational practitioners would tend to rely on their own past experience, re-using traditional forms about which they are knowledgeable

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23) As Herriott and Gross (1979) point out, this may be primarily because the programs were never really implemented. If so, this points to another knowledge base weakness: inadequate information on implementation processes themselves.

24) The literature here is very large: see Havelock et al.(1969) for a thoroughgoing review, and Sieber et al. (1972) for an experimental effort to remedy the situation.

Some promising large-scale efforts to improve knowledge utilization have recently been undertaken (National Diffusion Network, Project Information Packages, R&D Utilization Program, R&D Exchange) by the Office of Education and the National Institute of Education. Emrick et al. (1977) concluded that NDN had been effective in reaching over 4,000 school districts, aiding them with the adoption and implementation of validated educational programs. Stearns and Norwood (1977) concluded that the PIPs (self-standing packages for compensatory education programs) were somewhat effective, but needed an intermediary (linker) to help install them. For a good summary of these and three other change program studies, see Emrick and Peterson (1978). Final evaluation data on the latter two programs above are not available as we write.

and with which they feel comfortable. Where such forms are not easily applicable, or conflict with important goals, we might expect P/I groups to create shared "myths," to provide a stable platform in the absence of a reliable body of expert knowledge.

Domestication. Carlson (1965) has emphasized the fact that public schools in America are "domesticated," rather than "wild"; they are owned by the public. Survival is guaranteed: school will continue to be kept even when the most basic of educational goals (e.g., literacy, computation skill) are not being achieved for many students. A clientele is guaranteed (through compulsory attendance laws, and in most districts the absence of competition among schools for studnets).

These conditions tend to reduce incentives for innovation considerably, as Pincus (1974) has pointed out. By definition, domestication also serves to legitimize the existence of community pressure toward or away from innovation since, in America, education is defined as a local responsibility.

Permeability to environment. Most American schools are relatively "thin-skinned." Since they are embedded in a local school district organization, since they are defined as domesticated, and since their clientele (students) are in daily intimate contact with adult members of the surrounding community (namely, parents), influence from the environment can pass relatively easily through their boundaries. A newspaper article, an upset assistant superintendent, a few complaining parents, or a taxpayer's phone call to a Board member can often have a powerful effect on what goes on in a particular school building, especially if teachers' expertise is in question, as suggested above. Thus schools, at least from the inside, have a feeling of vulnerability: "bad" things can easily happen to the inhabitants when the bureaucratic or community environment is hostile. The various buffering and protective devices which principals create (such as not responding to central office memos, minimizing parent meetings, or requiring visitors to check in at the office first) may leave outsiders feeling that the school is impervious, a kingdom unto itself. But the point is that, from inside, the barriers are felt to be much needed and that vulnerability is an ordinary condition.

Key Dilemmas in Planning and Implementation

This section reviews eight key dilemmas--conflictful issues which those planning and implementing new schools seem to face recurrently. The preceding comments have been largely analytical and abstract, considering the planning/implementation enterprise from a moderate distance. However, these eight dilemmas surfaced in our thinking quite directly from observation and interviewing in our sites. They appear to be relatively pervasive issues, which P/I groups must resolve (and usually re-resolve) as the course of the enterprise proceeds. The dilemmas include (1) whether to choose innovative or familiar approaches; (2) whether to retain original planning goals or revise them; (3) whether to stay in active contact with the environment or withdraw from it; (4) whether to seek expert knowledge or rely on

one's own resources; (5) whether to seek feedback on P/I efforts or proceed intuitively; (6) whether to constrain or give more autonomy to planners and implementers; (7) whether to let the new school develop "by itself," or intervene to assist its implementation; (8) whether to routinize methods and procedures in the new school or leave things open and flexible.

The fact that these dilemmas are so pervasive (and often so acute) suggested to us that they are created by the basic features of the P/I enterprise itself, and by the forces we have described from the context, as they impact on the enterprise. Below we describe each dilemma, illustrating as fully as possible with data from our sites. Then we speculate on forces, drawn from the preceding analysis, which we think serve to move the P/I group toward one horn or the other of the dilemma. Those are displayed in force-field charts.

Just how a particular dilemma is resolved at any point will naturally depend not only on the balance of forces, but on the demands of the P/I group's "primary tasks," and their own capabilities. We will return to these determinants later: here the aim is to show the dilemmas as clearly as possible, usually with a brief sketch of how they were resolved.

Dilemma 1: Innovative vs. familiar choices. This dilemma seemed so pervasive in our sites, so much at the Center of what we observed, that it can be seen as a kind of "master dilemma," infusing the others that follow.[25] As P/I groups proceed, they must repeatedly consider whether to choose the unfamiliar, new and different when making planning and implementation decisions, or to elect for the familiar and well-tested alternative. For example:

> 1. During intensive summer planning by the faculty of Appelbaum High School, a health teacher had requested that her assistant principal order copies of a new book, Male and Female. Another teacher said: "We never used that book at my school, and I don't think it's really necessary. The other book is standard. I know that it will work, and if we have enough copies of it, we don't need Male and Female. I don't really know anything about that book." The assistant principal said, "I guess we don't need Male and Female. We can just go from our own experiences."

Male and Female was eventually ordered and put into use, but the early resolution of the dilemma was as above.

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25) There is a temptation to consider that one horn or another of any particular dilemma is better, more preferable: in this case, that innovation is better than familiar practice. But the defining characteristic of a dilemma is usually that a chooser is struggling between two goods, rather than a good and a bad. Thus the choice is not between innovating and giving up--but, given a generally innovative intent (the case we are studying), whether to choose an innovative (untested) solution or a familiar one (safer, and perhaps more likely to achieve the innovative goal).

2. During planning for student selection for Arts Coop, an experimental arts high school, the director suggested that the auditions for students in various domains of the arts include some unusual warm-up and improvisatory exercises developed by a local theatre company. Several faculty members resisted the idea, saying it was only important to see samples of students' artistic performance. However, the director persisted, and asked the head of the theatre company, an influential person very favorable to the new school, to come and demonstrate the exercises with the faculty members themselves. Following this, they reluctantly decided to include the exercises as part of the auditions. Later, the director (over some faculty resistance) decided to use the theatre company's help in intensive "community-building" work with the students and faculty for the first three days of school.

What are some of the forces generating this dilemma? In example 1, the P/I group members were in part responding to the presentce of firm information about the familiar text, the status of the A.P. and the lack of persistence by the health teacher who wanted to innovate. In example 2, the dilemma was partly generated by the director's persistence and the prestige of the theatre company head vs. the faculty's dubiousness that a non-familiar solution was needed. But back of these immediate pressures to choose the innovative or the familiar are more general, inherent ones, stemming from the very nature of the P/I enterprise and its context. They are listed in force-field format in Chart 1.

The original mandate to create an innovative school, when coupled with the professional commitment of planners and implementers to their vision, plus existing local incentives for trying the new and different, all tend toward supporting choice of innovative means. So does the extra energy investment characteristic of professionals--an investment which unfamiliar, innovative practices typically require.

However, as we have seen, guaranteed survival and clientele tend to weaken incentives for innovation in American schools. More then this, the vulnerability of the school, and the legitimacy of community pressure, mean that those parts of the district bureaucracy and community with traditional views can exert influence on the school to be less innovative. Vulnerability, along with the uncertainty which is characteristic of innovative enterprises, tendsto make for insecurity on the part of P/I group members, so risk-avoiding strategies begin to appear: traditional and familiar solutions with known results are chosen over those which, if tried out, might have serious consequences. Note also that the absence of a strong knowledge base is relevant: without it, P/I groups are once again impelled to draw from familiar practice. And such practice may be not only a defense against uncertainty and insecurity, but a positive buttress for particular vested interests of particular role groups.[26] Macro-system

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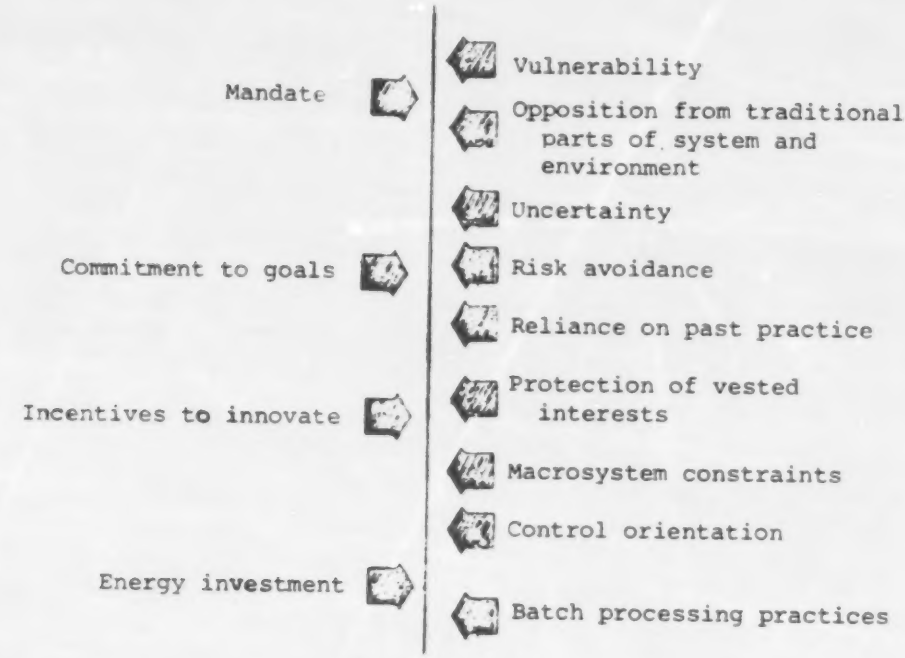
26) For example, the innovation of having formally-designated "team leaders" in teaching teams may jeopardize the interest of other teachers in salary increases and the principal's interest in retaining central control; the innovation of programmed instruction interferes with the teacher's role-derived "need to explain" (Carlson, 1965), and perhaps the exercise of autonomy and expertise.

Chart 1

FORCES BEARING ON DILEMMA 1: INNOVATIVE VS. FAMILIAR CHOICES



constraints relevant to the innovative idea under consideration also come into play. Finally, since many new-school innovative practices turn out to involve treating students more humanely and more individualistically, we can predict that the control orientation and batch-processing practices which have been characteristic of the people-changing system called "education" will serve as a force toward the "familiar" horn of the dilemma.

The actual level of innovativeness at any time (the position of the vertical line in Chart 1) will depend on the balance of forces. For example, if incentives to innovate are increased, such as the availability of new Federal funds for the sort of program being envisioned, the level of innovativeness will increase, shifting toward the right. Or, if uncertainty increases (ex: teacher hiring is delayed by union negotiations) we would expect the level to shift to the left, toward the familiar.

Many other forces may enter the arena in any specific site to determine the actual level of innovativeness, from a city-wide fiscal crisis to the preferred coping style of the new school's principal. Here we only

stress those forces that seem to be an inherent part of planning and implementing new schools in the American context, and that bear most centrally on the issues of innovative vs. familiar choice-making. We make no brief that these are the only forces[27] --just that given the nature of the planning/implementation enterprise and its context, these ones, at least, are to be expected, and must be reckoned with in some way by the P/I group.

One last editorial comment before we proceed with the other dilemmaa. We do not wish to be understood as claiming that these dilemmas only arise from forces external to the P/I enterprise (such as macrosystem constraints or vulnerability) which serve as barriers to the noble thrusts of the P/I group. Rather, the dilemmas are also always caused to some degree by inherently contradictory forces within the P/I enterprise itself (for example, the uncertainty which inheres in doing anything for the first time, versus the desire to succeed in achieving one's professional hopes for the school). Such forces would remain even if all external barriers were magically removed. As we watched our sites, these two sorts of dilemma-causing forces were usually inextricably intermixed; our force-field charts will not try to separate them cleanly. But both are always important. The dilemmas of P/I groups are partly a result of their efforts to confront the barriers and constraints of the American public school setting, and partly a result of conflicts and paradoxes generic to the process of creating a new school as such.

Dilemma 2: Goal adherence vs. revision. New schools usually have somewhere early in their history a more or less explicit vision, an outline of certain basic goals it is felt the school should accomplish. P/I groups often find themselves caught between the desire to retain certain goals as crucial, and the need to let go of them as stern exigencies arise during the course of planning and implementation, or as "better ideas" emerge. For example:

1. The planners for College High School, one of our sites, had been charged with creating a school that would meet the needs of low-income Black and Hispanic students with poor achievement records, a good cross-section of students in the city. But when it came down to actual planning with volunteer teachers who would be implementing the school, the director agreed to select students most of whom would be reading well above grade level. This would weight the students strongly toward the academically adept, not the cross-section the planners had envisaged. The teachers liked this--they wanted to have the best students they could get. But the planners were quite concerned, and felt their vision had been set aside for expedient purposes.

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27) The overwhelming balance of forces toward the "familiar" side in Chart 1, in fact, makes one wonder why any new innovative schools are contemplated at all. It seems likely that other forces toward the innovative are in play; the ideology of professionals favoring "change," the steady input of newcomers to the field, and genuine commitment to restructuring an imperfectly functioning educational system. Here too we should re-emphasize the importance of such supposedly off-target functions as career mobility for innovators, boredom reduction, and the satisfactions of theatricality.

2. The early planners and director for Arts Coop had from the beginning felt strongly committed to the goals of "community-building" (knitting together students and faculty into a cohesive whole) and "interdisciplinary learning" (dealing with issues in art across the range of specializations). The faculty, hired from the ranks of professional artists, felt somewhat differently.

At the last faculty meeting before Arts Coop was to open, the director reviewed a plan to have one or two days a week as "interdisciplinary" time dealing with a generic issue, such as "form", across all the arts. From the field notes:

> Jack objected to this whole idea and said he thought they had decided they were not going to impose on the kids... The director said the interdisciplinary approach was the presumption of the program. Milton said the kids should decide what areas they should work on... Carole objected...this would disperse the kids too much, they wouldn't be able to develop anything in depth. Wouldn't it be better to delay the interdisciplinary approach for a while?... Iris spoke up and supported the interdisciplinary idea, since the arts in general had that quality. But Jack objected, saying that dance was unique, and you couldn't melt it into other art forms.. The director then said he felt they had to start with an interdisciplinary approach in the beginning, perhaps just once a week...They basically came around to accepting the idea.

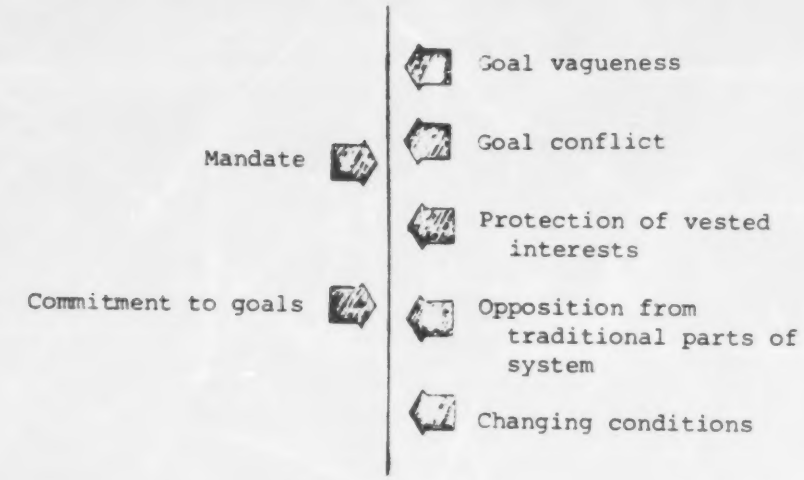
What are some of the forces generating this dilemma? As before, there are some site-specific ones: in Example 1, the director was concerned about gaining the volunteer teachers' acceptance of the idea for the schools; in Example 2, the faculty members were preoccupied with protecting enough teaching time for in-depth learning by students in their specialties. The more general forces contributing to this dilemma for P/I groups are shown in Chart 2.

On the one hand, the mission of creating a whole, new, innovative school, in concert with the professionalism of the planners and implementers, tends to create an over-all mandate, heighten commitment, and thus support adherence to the original goals.

But, on the other hand, we note that the goal diffuseness which is characteristic of schools, goal conflict (heightened by professionalism and the weak knowledge base), protection of vested role interests, and opposition from traditional parts of the surrounding system are forces serving to move the P/I group in the direction of revising--or even giving up--certain aspects of their vision. Furthermore, as the P/I group moves more and more into implementation and conditions change, goal revision may well be in order. Thus the basic dilemma is not so much between rigid adherence versus abandonment, as it is between protecting the original vision versus making an adaptive response to unanticipated consequences emerging during the enterprise.

Chart 2

FORCES BEARING ON DILEMMA 2: GOAL ADHERENCE VS. REVISION



Dilemma 3: Environmental contact vs. withdrawal. The new schools we studied existed in an environment including the local school district organization and the community. It was by definition necessary for them to obtain financial resources and endorsement from their environments. Yet they were at the same time deeply preoccupied with the internal dynamics of designing and building an educational social system. We often noted rather different responses by P/I groups, as between proactive, outgoing, environment-confronting action on the one hand, and reactive-avoidant, inwardly-oriented responses on the other. For example:

1. During the final planning for the new open-space Lincoln Acres elementary school, repeated public meetings and letters to the editor of the local newspaper showed that many citizens were very critical of the plans, feeling that the open space had violated understandings about having self-contained classrooms available as an option ("We have been lied to...shafted," said several citizens). In spite of this, the faculty continued with their plans for open space. And in

one planning session when the question was raised as to whether some structure for parent involvement should be developed, the principal said: "No, we're not ready yet."

Conflict with the community continued and heightened. It was only under pressure from the Board that the faculty and principal agreed to collect data from parents through a survey. But the results were largely ignored as planning continued.

Almost at the peak of the conflict, the faculty went away for a previously-planned "communication workshop" for themselves at a nearby Playboy Club. There seemed to have been no consideration of postponing or rescheduling the workshop to a time or place which would not be so inflammatory if it became known to the community (which it did).

2. The continued survival of Arts Coop was, its planners felt, quite precarious, since the students were supported by special add-on budgets from each of the participating school districts. During the months before the school opened, the planning leader and committee members, who had developed a strong team spirit, made a wide range of strong efforts to build a broad base of support for the school, including meetings with local businessmen, the League of Women Voters, each local board, local artists and art organizations, and widespread coverage in local media. In addition, they talked persuasively to guidance counselors in each of the sending districts who would serve as "gatekeepers" enabling students to attend Arts Coop, to art teachers and to principals. They also formed a Friends of Arts Coop group to present talks and slide shows to PTA's and other citizens' groups.

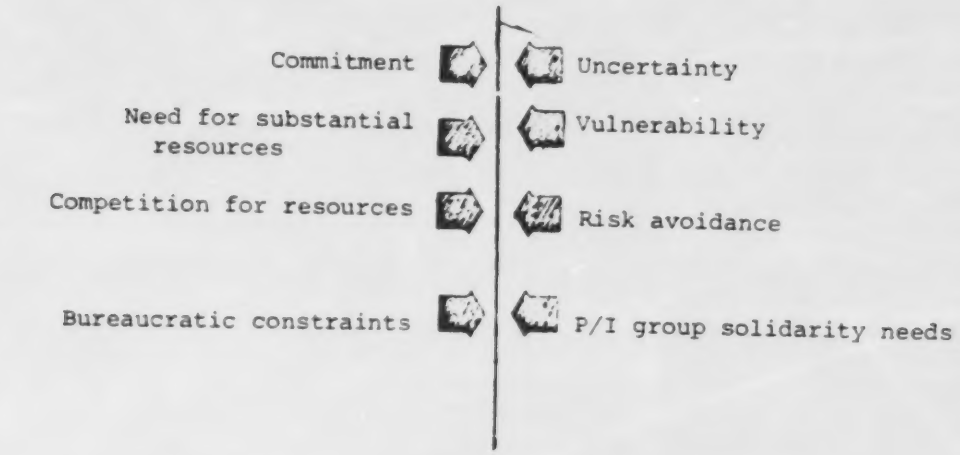
The P/I groups for Lincoln Acres and Arts Coop resolved this dilemma quite differently. Chart 3 suggests some of the major inherent forces that may have been at work.

In general, the commitment of P/I group members tends to move them toward active engagement with their environments, since substantial resources are required for a whole school. So does the fact that competition for resources with other schools in the district is an inherent factor: one must join the struggle in order to gain from it. In an interesting way, the very existence of the surrounding system's bureaucratic constraints relevant to the new school is also a force for increased environmental contact: the P/I group feels impelled to cope in some ways with (confronting, alterning, circumventing or deliberately ignoring) those constraints that threaten the enterprise.

However, the high uncertainty, vulnerability and tendencies toward risk avoidance which, as we have already seen, are inherent in the task of creating an innovative, complex social setting which is permeable to hostile influence, tend to push planners and implementers toward a cautious, reactive stance: "Let's wait and see what they do before we make a move." We have also repeatedly noted that P/I groups seem to need to develop a good deal of internal solidarity and team spirit as a way of coping with uncertainty and risk (and perhaps as a way of insuring continued commitment). Thus, contact

Chart 3

FORCES BEARING ON DILEMMA 3: ENVIRONMENTAL CONTACT VS. WITHDRAWAL



with the environment tends to be postponed, as in the Lincoln Acres example, until "we have our act together"--and may thus, for practical purposes, be avoided.

The Arts Coop planners, on the other hand, not only had little extra need for solidarity, since they were already very close, but realized that they were in very keen competition for resources. Thus, they engaged in much more active environmental contact.

Dilemma 4: Expertise-seeking vs. self-reliance. A fourth dilemma we have recurrently noted in our sites focuses on a different sort of environmental relationship. We have just been talking about the acquisition of financial resources and endorsement. P/I groups also steadily find themselves in need of expert knowledge, information from what might be called the professional environment. The choice regularly presenting itself is whether to actively seek for, and import such knowledge to the P/I effort,

or to rely on the group's own internal resources. The issue is not precisely parallel to that of the preceding dilemma, where activeness/passiveness in relation to obtaining money and support from the environment is the crucual issue. Here the question is whether the P/I group will open its boundaries, reach out for assistance, allow the content of its decisions to be influenced by externally developed and validated knowledge and/or knowledge-bearers--or conclude that sufficient expertise exists internally. Examples from our sites are:

1. The planning committee for College High School did a good deal of knowledge-seeking: members attended workshops, visited other schools, and called in experts from the school district and the sponsoring college. But the committee appeared to be essentially resistant to <u>using</u> the knowledge sought; little was gleaned from the encounters, partly because the P/I group members defined <u>themselves</u> as experts, and felt they could rely on their own resources.

When our research project offered funds for hiring consultants, the chairman accepted, and two consultants began attending meetings. They tried to assist both with the problems of environmental threat and uncertainty faced by the group, and with improving the P.I group's often chaotic internal processes. But the committee regularly resisted, derided or ignored their suggestions; the consultants seemed unable to gain the trust of the group, or to adapt their usual consulting approaches to the special needs of the group. They were never asked back.

2. One of our districts, Westgate, faced with the need to create new elementary school facilities, considered several consultants and finally hired one whose past performance was well known to a board member. The consultant, Dr. Angelino, got the superintendent, central office administrators and principals to meet together to carry out active planning, a style of work new to them. He helped them understand current practice in open-space education, encouraged them to visit other schools, and supported their decision to move in a non-traditional direction with plans for the new schools. The administrators felt he had been extremely helpful.

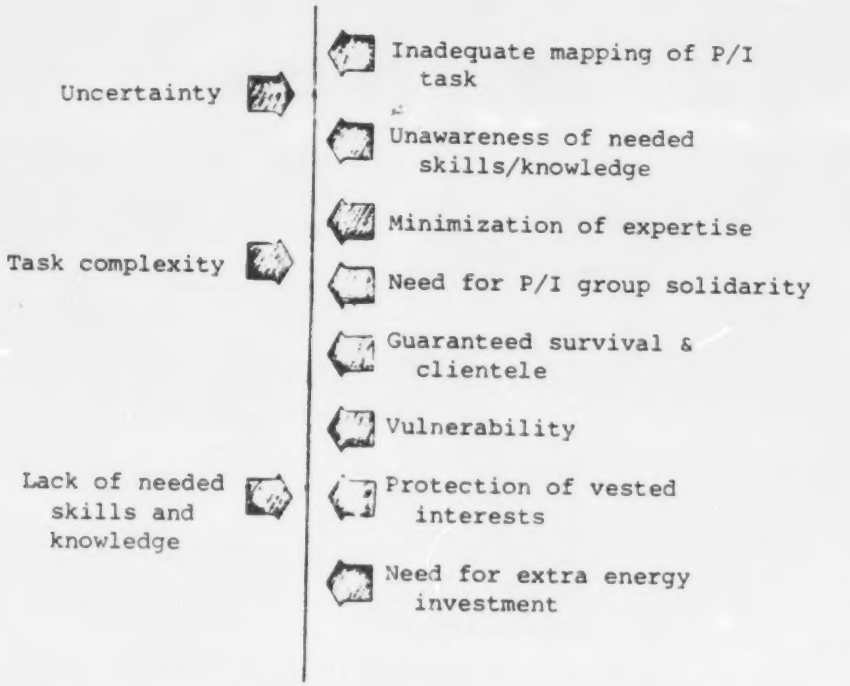
Later, during in-service preparation for the new open-space program, another consultant, Professor Orenstein, was asked to meet and work with the teachers. She did so, was helpful, and advocated to administrators that they accept many of the teachers' suggestions (regular meetings with the principals for goal-setting, early dismissal to provide time for planning, and special orientation meetings for parents). But the administrators minimized these suggestions and did not act on them. Orenstein was not asked back during the fall, even though teachers were having much difficulty. Later, one principal brought an experienced open-space teacher, Brenda Steiner, in to observe his teachers, discuss their problems with them and make suggestions. The teachers felt she was helpful. An administrator said, "People like this are real; the teachers don't see them as 'pie in the sky' or as 'flaky administrators'--they are the genuine article." He suggested that all grade levels in the new schools use experienced teachers as consultants, and the principals agreed.

The last ambivalent flip-flop occurred when a few parents began complaining that the schools were "too open," and both administrators and principals decided to keep a lower profile. No more consultants were invited in.

In College High School why such decisive rejection of expertise? And in Westgate, what might account for such ambivalence, and such differing resolutions of this dilemma at different points in time within the same system? Chart 4 reviews what we see as the main inherent forces at work.

Chart 4

FORCES BEARING ON DILEMMA 4: EXPERTISE-SEEKING VS. SELF-RELIANCE



The fact that a complete, new, innovative school is being planned tends to generate a good deal of uncertainty; the task ahead for the P/I group is also undeniably complex, incolving a wide range of problems, from the technical (how does flexible scheduling work?) through the political (how can we bypass the district requlations on hiring to get the teachers we want?) to the operating problems of the P/I group itself (how can we deal with our conflicts more directly rather than smoothing them over?). Thus it is typical for there to be gaps and lacks in the skills and knowledge required. These needs tend to generate a push toward seeking and utilizing expert knowledge to advance the enterprise.

On the other hand, the path toward external knowledge utilization is not smooth. The weak knowledge base in educational systems tends to bring about an inadequate mapping of the P/I task, which is nearly always seen as simpler and more "common-sense" than it in fact turns out to be. And as we have noted earlier, there may well be unawareness of needed skills and knowledge. Under these circumstances, it is quite natural for P/I group members to minimize the potential usefulness of outside expert knowledge and expertise of knowledge-bearers. As we have seen earlier, the stresses of the P/I enterprise tend to build up a need for P/I group solidarity and mutual support. Such needs push members more toward relying on internal resources: to call in outsiders implies that one's peers are less than competent, and honoring each other's expertise builds the group.

Beyond this, there are other factors which make for self-reliance rather than the use of outside expert knowledge: the survival of the school and the presence of a continuing clientele is usually guaranteed, so that (within limits) no matter what solutions to problems are put in place, life will go on. When it happens that P/I group members do feel vulnerable, open to hostile influence (as in the last Westgate example)--they may be reluctent to involve outside knowledge-bearers, such as consultants. Here too the protection of vested interests by role occupants is often at work: those who feel threatened or diminished by the entry of outside assistance will resist it; more positively, people want to exercise their own professional competence. Finally, the fact that people are usually already overloaded and making extra energy investment in the new school can make them reluctant to invest additional energy in seeking outside expertise when they are not sure it will pay off.

Dilemma 5: Feedback utilization vs. intuitive action. We have noted in our sites that P/I group members often face another dilemma: should they collect thorough, careful, systematic data on the results of their efforts, to guide subsequent planning and decision-making--or should they make the practical assumption that things are okay and just proceed intuitively and directly? The feedback which could be collected and used may deal with the functioning of the P/I group itself (for example, a post-meeting evaluation discussion), with the functioning of the school (for example, a "stock-taking" faculty meeting or a questionnaire), or with the environment's relation to the school (parent attitudes toward a revised report card scheme). The literature on planned change is so full of exhortations to get feedback (which is naturally the rational, effective way to proceed) that it is easy to forget that collecting and using data can be an energy-consuming, often threatening, and fallible process. In any case, the choice of how much

"objective" data to collect and use--as versus proceeding on P/I work with minimal explicit attention to the consequences of action--does represent a dilemma. Examples from our sites include:

1. The Lincoln Acres faculty, who had been proceeding with their planning of an open-space program although many parents had objected, were required by the Board of Education to carry out a survey of parent opinion. However, they disliked the idea, wrote a letter of protest to the Board, and felt upset and angry because they wanted to work on the school's program. The survey was hastily and poorly planned, and the results were dismissed by the principal when he reported a partial tabulation to the Board two weeks later, saying that it was not clear what the results meant. Later, selected results were quoted by the principal to reassure the faculty, as well as by a militant parent to buttress her position against the program.

2. The Arts Coop planners requested a summary report of our researcher's observations of their planning so far. She prepared a 33-page summary, dealing with such issues as governance, director and student selection, resource acquisition, knowledge use and environmental endorsement. The report was only descriptive, and gave no advice. The planners read the report carefully; the director told the researcher that they had been "reassured," feeling that they had been "doing things right."

After Arts Coop started up, the director and faculty collected questionnaire data from students on their interests and needs, as a basis for planning. In the second week of the school, the director asked the students in a large meeting:

> Please take a pencil and write on these questions. This will be a record of the program, and also let the staff see what the issues as well as the strong points are. First, write any strong impressions you have--of a class, a teacher, other students. Second, any problems or difficulties you have had, things you didn't feel good about. Third, things that you liked.

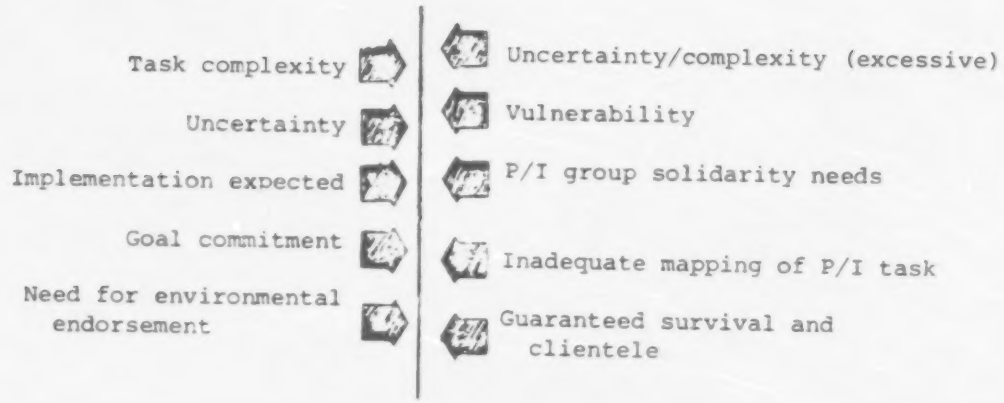
There was a faculty meeting after this session, but the director did not discuss or use the material the students had written; the faculty spent its main time discussing and critiquing the day's program which had just been completed.

3. Our research project collected extensive questionnaire data from Westgate teachers in two schools on their attitudes toward open space teaching, their morale, perceived problems, and many other aspects of the newly-implemented schools. When we offered to report the results back at a faculty meeting so the data could be used in planning for the following year's program, one principal said, "That would be like going into a patch of poison ivy and turning over each leaf to see what was under it." He and the other principals accepted the idea of a printed summary, but insisted that the section on "perceived problems" be deleted because it would reflect poorly on the principals' performance in the two schools and possible lead to negative action from the school board.

What might account for these varying resolutions of the dilemma centering around use of explicit feedback? Chart 5 outlines the forces involved.

Chart 5

FORCES BEARING ON DILEMMA 5: FEEDBACK UTILIZATION VS. INTUITIVE ACTION



(Level of explicit feedback use)

Intuitive action.....Feedback utilization

A new, innovative school, as we have noted, represents an especially complex set of planning and implementation tasks, with a good deal of associated uncertainty from start to stable operation. Data are a prime way to reduce uncertainty. The fact that actual implementation is expected, rather than only preliminary abstract "planning," along with task complexity and uncertainty, means that explicit running information on the consequences of action decisions is much needed as the enterprise proceeds.[28] The stronger the commitment of P/I group members to their vision--their goals for the school--the more likely it will be that they will seek data to monitor their work, and discover whether the vision is on the way to being

28) It could be argued that excessive uncertainty and complexity might push P/I groups in the direction of intuitive action: "We'll just have to play it by ear, sort it out as we go." One speculation is that such an outcome is more likely when survival is fully assured, so that decision-steering data are irrelevant.

achieved.[29] The P/I group needs to know regularly and steadily just what it is in fact accomplishing, so that subsequent decision-making is based on reality. So feedback is needed and wanted. And the fact that P/I groups need the endorsement of their environments is another pressure for feedback-seeking and use--if the data reflect favorably on the P/I enterprise.

But the very uncertainty of the enterprise, and its vulnerability to hostile pressures, also tend to minimize data use or lead to its "management" (as in the Westgate and Lincoln Acres examples). Uncertainty and vulnerability also emphasize the need for solidarity within the P/I group, who become, in the words of one planner, "such good friends" that they hesitate to examine their real failures.[30] Thus feedback, particularly on internal P/I group processes, tends to be minimized.

We have also noted that the weak knowledge base in education tends to promote an inadequate mapping of the P/I enterprise, so that immediate goals, strategies for reaching them, milestones, etc., are often not well differentiated. Without a clear sense of the flow of P/I work, it is hard to know when, from whom, or even why data should be collected. And finally, if survival is the foregone conclusion, the results of immediate actions do not really bear that much interest for P/I group members.

Dilemma 6: Implementation constraint vs. autonomy. When plans are being made, and as they are implemented, there is a recurrent dilemma which P/I groups in our sites have often found difficult to resolve. Should plans be specific, crisply formulated, with definite provision for linking planners to those who will carry out the plan? In short, should the hand of the past control actions in the present?

Or, on the other hand, given the fallibility of humans, the continual presence of unanticipated outcomes of decisions, and the likelihood of the unexpected (in our sites, this included floods, heart attacks, and the surprising scrupulousness of fire inspectors), perhaps it is more sensible to leave a good deal of looseness, flexibility, and autonomy to those who must carry out plans, and to worry little about how to link planning and implementation.

This dilemma appears, it should be noted, not only when planners and implementers are different (a core group of planners develops a school design which is implemented by many new faculty members not in on the original planning), but when they are for practical purposes identical (the principal and faculty are the P/I group: they do the final planning, then carry it out). Even in the latter condition, the question of firmness, specificity and explicitness of plans, and how much constraint should be exerted over day-to-day implementation (as contrasted with providing slack,

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29) There is, of course, the likelihood that strongly-held visions will also induce self-delusion, biased interpretation of data to show that "we are making it." But the preoccupation with data is still there.

30) Janis and Mann (1977) have documented this dynamic clearly in the case of group decision-making in the White House (e.g., the Bay of Pigs fiasco).

or "loosely coupled" implementation of the plan) is at issue.[31]

For example:

1. During an interview with one of the planners for College High School, when it had become clear that financial and other pressures had indefinitely postponed the location of a site and hiring of staff, he was asked what the main problems were that had hampered work. He said:

> There's a dichotomy there, that you want to move ahead, but at the same time you don't want to hire a staff that has no ownership in as an important decision as total planning. So you're kind of schizophrenic about how fast you should move... You need some of the key actors, the people who are going to implement. You reach a point where to go beyond this is unfair, because you are determining the philosophy, the administration, the day to day functioning of the operation without even involving, in fact, the people who will be living in that environment.

2. The basic early planning for Appelbaum High School was done by Ann Woodward, who assembled resources and designed the over-all program, including an active work experience program for students in business firms. Woodward had hoped to become the principal, but her application failed because of bureaucratic/political reasons. In any case, she worked hard to promote linkage between the plans and their implementation, by introducing the new principal to key resource people at a party, by proposing specific names for staff positions (including Marvin Lieberman, who had assisted her during the planning) by designing the staff training program, and by getting the forward budget and certain crucial equipment in place.

   However, many aspects of Woodward's plans were only partially implemented. She had wanted a humane, equalitarian climate, and proposed that teachers should not have their usual desks at the front of the rooms--and even that there should not be separate student and faculty toilets. These proposals were simply dismissed.

   The work experience program fared a bit better. Though it did not develop at all during the first year of the school, the principal asked Marvin Lieberman, whom he had appointed as an assistant principal, to develop such a program during the second year. He made progress with an internship program limited to a few students, but principal and faculty alike resisted a full-scale implementation because of the scheduling problems involved.

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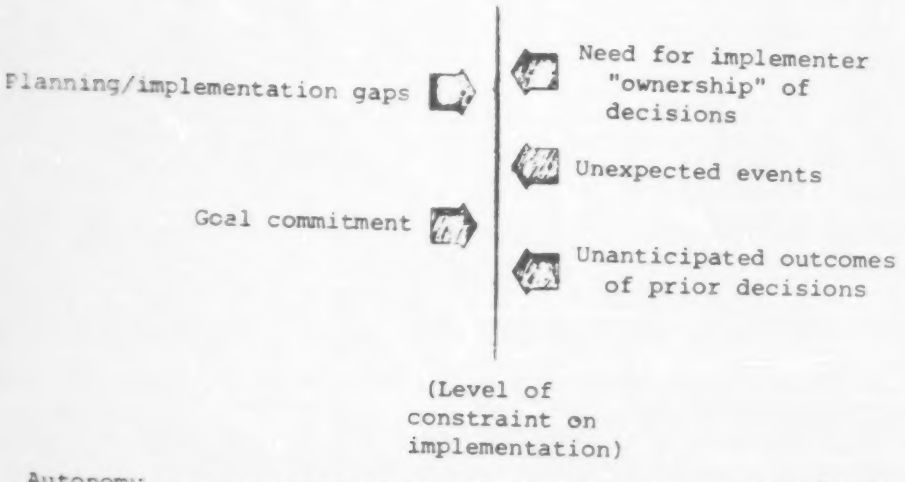
31) See Weick (1976) for a thoughtful analysis of "loose coupling" in educational (and other) systems; the clear implication is that "loose coupling" is not necessarily a defect in organizations, but a strategy with positive value, enabling better adaptation, more inventiveness, self-determination, and resistance to "trouble spread"--all at less cost than for tightly-coupled systems.

Chart 6 outlines the inherent forces we consider to be at work.

Chart 6

FORCES BEARING ON DILEMMA 6: IMPLEMENTATION CONSTRAINT VS. AUTONOMY



Planning and implementation, though they are not "separate" activities, do differ in emphasis. Envisioning a desired state of affairs is one thing, but taking action on the real world to induce that state is a different kettle of fish. So even when planners and implementers are the same person, there are many slips and gaps likely. Thus planners tend toward constraining and limiting what they or others will do during implementation: that, after all, is what "planning" is for, is it not? This pressure toward constraint can be even stronger when new actors are coming on the scene: they will have to be oriented carefully, the plan must be specific and unambiguous, etc.[32] Constraint of this sort is, of course, stronger when goal commitments are strong: we must be sure that our vision happens.

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32) At its most extreme, this reminds us of Wouk's dictum in The Caine Mutiny that "the Navy is a machine designed by geniuses to be run by idiots"; in educational research and development, most efforts to design "teacher-proof" materials assumed a kind of idiocy in the implementers.

On the other hand, even the most dedicated of planners realizes that implementers who do not "own" decisions will have considerable trouble in carrying them out well. And most people recognize that slips between cup and lip are to be expected, that plans of mice, men, and women "gang aft agley," that new things are always popping up, and that solutions put in place nearly always create new problems. Thus, the need for implementer autonomy. But...we care about achieving our goals, so the dilemma continues.

P/I groups can resolve this dilemma in part by the way they go about "meta-planning"--creating a "plan for planning" that specifies how planning and implementation will be linked, among other things. We shall return to this topic later.

Dilemma 7: Laissez-faire vs. intervention. Once implementation begins in earnest, we have noticed that another characteristic dilemma appears: should implementers be active or easygoing in correcting difficulties and problems the new school encounters? One position, frequently noted, is that the essential plan and its early implementation are mostly okay and should not be seriously questioned or re-oriented. People will "work things out"; all that's really needed, so to speak, is a little oiling of the machinery here and there, plus routine maintenance. Trying to make things work better may, realistically, only make them worse.

The other horn of this dilemma is that in most new, innovative enterprises, active intervention may often be needed. If the staff's skills are inadequate, they need active support, resocialization or training; if this does not work, the possibility of firing people must be considered. Or perhaps the basic plan is not really workable, and some form of reorganization is indicated. Perhaps additional personnel will be required. All these forms of intervention assume that implementation will not just "happen" naturally or easily, but may need active assistance--or even surgery or reconstruction. For example:

1. In one Westgate open-space elementary school, we noted that the staff, nearly all of whom were new to open-space education and to team teaching, were experiencing much stress in attempting these innovations. The school nurse, for example, reported to a researcher that unusually large numbers of both teachers and students were reporting aches, pains and tensions to her. Yet the principal seemed to be largely occupied with routine duties, and held few meetings, resorting for announcements to printed memoes which teachers initialed to show they had read them. In an interview he said:

> We've had no time for faculty meetings. I have not had time even to eat lunch. I've talked to teachers individually, and they feel better off alone. Teams are meeting from time to time, though it is not a definite thing. I leave them by themselves. If they have problems, they come down.

2. In another Westgate school, the principal's stance toward aiding implementation was quite different. He met regularly with teaching teams, had a weekly faculty meeting, and talked frequently with teachers on how they were doing. His contact was so active that several teachers said to our researcher that they often hesitated to say anything critical or negative to anyone, because they knew "it would get back to George".

The principal also made active plans for dealing with teachers who were having the most difficulty. In an administrative meeting, referring to a first grade teacher, Ruth Sefero, who was having a good deal of conflict with the other members of her team, he said:

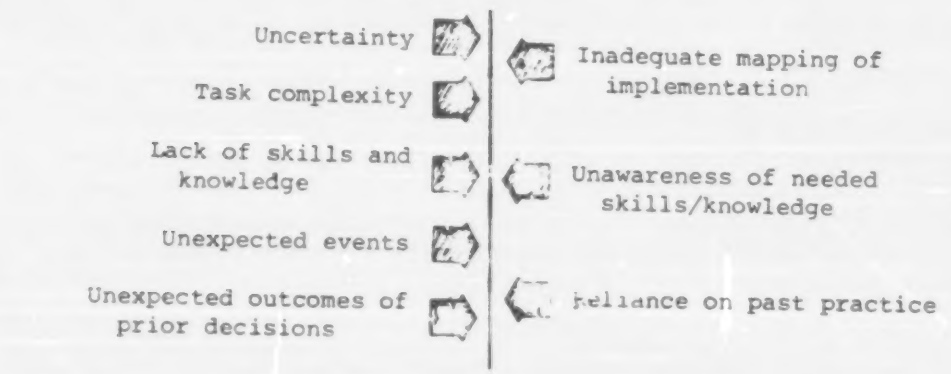
> I told her she's not going to make it in open space, and she should consider alternatives and work them out with me... Here's my plan. I will probably have two sections of the first grade, take them out of the open-space pods, and move them to the fifth grade section where there is a folding partition. Ruth can teach there, so can Alice Scott /another pod member/. And Marie /the other pod member/ can shift over to the third grade--they're teaming really well. /Note that he is both breaking one team and introducing a stranger to another./

(Perhaps this is the place to remind the reader that this dilemma, like all those preceding, is a choice between goods. It may be helpful to mention that the teachers in Example 1 ended up implementing open-space education rather more fully, with more satisfaction, than did the teachers in Example 2.)

What may be the inherent forces at work to produce this dilemma? Chart 7 reviews them.

Chart 7

FORCES BEARING ON DILEMMA 7: LAISSEZ-FAIRE VS. INTERVENTION



The newer and more innovative the school, the more likely it is that uncertainty will be high. The tasks of implementation are often quite complex, and (by definition) implementers will not automatically have the skills and knowledge their new roles require.[33] Furthermore, unexpected events, and surprising outcomes of prior decisions are likely to be typical. All these forces impel P/I groups to do something, to intervene in the emerging system of the school in some way to ward off distress, confusion, and threatened failure.

However, as we have noted, the weak knowledge base of education has important countering effects. Implementers often have a poor and undifferentiated map of what is involved in implementation, and may not be aware that certain skills and knowledge are crucial. And there is a natural and sensible tendency to rely on familiar practice and traditional role performance as a stability-giving platform.[34] Finally, there is a sense in which many of the arguments centering around the "autonomy" horn of Dilemma 6 also apply here: active intervention can be seen as somehow infringing on implementer autonomy and reducing the likelihood of flexible coping.

Dilemma 8: Routinization vs. flexibility. A final dilemma, one which also afflicts P/I groups from the time the new school opens, centers on whether to stabilize, solidify, and universalize working procedures and the structures which support them, or retain maneuvering room for the unique, the unforeseen, and the particular. Without a reasonable degree of clarity and shape in the social system of the school, enormous amounts of energy can be wasted, wheels are steadily re-invented and as steadily discarded, and things will not "settle down" to anything that feels like a productively-working enterprise.

But institutionalization, it goes without much saying, can be the death of innovation. The design for comfort can too easily outweigh the hopes people began with. Uniform treatment for idiosyncratic situations dries up

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33) This position has been very well outlined by Gross, Giacquinta and Bernstein (1971), and by Herriott and Gross (1979) ; both studies also underline the fact that organizational supports for new role behavior, plus active feedback-seeking mechanisms, are essential during implementation.

However, there is a paradox: since lack of skills and task complexity usually add up to overlaod (as in Example 1): teachers and administrators may be so preoccupied with short-run coping ("What am I going to do tomorrow?") that no serious intervention to improve implementation ever takes place, and we are back to a de facto laissez-faire style.

34) Note that innovative schools which relied on committed (but inexperienced) teachers have encountered implementation difficulty (Smith & Keith, 1971; Gross, Giacquinta and Bernstein, 1971).

inventiveness; habitual responses to problematic events cause people not to notice what is really there. Poetry is submerged in the machinery. Examples:

1. The Arts Coop director, who was strongly committed to the idea of an "interdisciplinary day" to cut across all art areas in the school, pressed it over the faculty's reservations (as we saw in Example 2, Dilemma 2). Once there was reluctant agreement to include this innovation as part of the new school, the director continued to press: he suggested that interdisciplinary day always be held on Thursday, so that sutdents and faculty would "get used to it," treat it as a regular part of the school, and not have to decide anew each week or two when it would be held. Faculty members objected to this routinization, pointing out correctly that some faculty members were never at school on Thursdays, and that true interdisciplinary work involving all areas would thus not be possible. However, the director persisted, and Thursday became interdisciplinary day.

2. During the firming-up of teaching teams for Lincoln Acres School, the faculty, with the principal's concurrence, agreed that teams should not have team leaders; they did not wish to formalize a hierarchical relationship within teams, but to leave team members free to work in their jointly most productive manner. Ellis Brown, the principal, suggested that basic decision-making and problem-solving should reside in a weekly Thursday faculty meeting, to be supplemented by a learning-oriented faculty meeting on Monday. But as the pressures of school mounted, teachers began complaining that two after-school meetings were too much, and proposed lunch meetings called for problem-solving whenever they were needed. However, it appeared more and more that difficult problems were being dealt with by Ellis alone, or by Ellis with individual teachers, and the faculty felt more and more out of communication with each other, and did not see how to cope with the increasing problems of parent dissatisfaction with the school. Not until the crisis of a teacher's being fired did the faculty come together for serious problem-solving---this time directed against Ellis.

What forces are involved in generating this dilemma? In fact, we have come full circle from our first dilemma: whether to make the innovative or the familiar choice. The same general forces apply as in Dilemma 1, but for implementers a sort of meta-question is now raised: can our new innovative school be routinized, stabilized, institutionalized in a way that protects and furthers its originally innovative intent--or will that intent be lost among the standard operating procedures?

At the most grandiose, we are dealing with one of the root problems of civilization, the two aspects of which have variously been labelled classic/romantic; gesellschaft/gemeinschaft; universalism/particularism; nomothetic/ideographic; or (most anciently) Yin/Yang. The implementers of new schools are not immune, in their micro-societies, to the general dilemma of stability and change in human affairs. Though P/I groups begin with the hope (and assumption) that they can "make things new," they must ultimately face the question of how far to stabilize whatever newness they have achieved, and how far to keep pressing into new newness.

Primary Tasks for Planning/Implementation Groups

The dilemmas we have just been reviewing arise repeatedly in the course of P/I group work. What is that work devoted to, essentially? It seemed to us that the energies of P/I groups could be seen as aimed at the accomplishment of six "primary tasks"--major categories of planning and implementation efforts. They are, in brief:

1. Political stabilization: obtaining money, environmental endorsement, and a place in the local power structure.

2. Knowledge utilization: acquiring and using technically-good information, expertise.

3. Vision development: developing coherence among basic philosophy, goals, and desired identity or image of the school.

4. Social-architectural design: creating an organizational plan, and selecting people to be part of it.

5. Actualization: linking the plan to start-up and early implementation, developing the real social system of the school.

6. Institutionalization: stabilizing the school, including its methods for continuing self-renewal.

Once again, we should emphasize that these tasks--which are present in any planning/implementation enterprise--are especially demanding and complex in the case we are studying: schools which are both new and different for their environments. The more innovative the effort, the more energy will be required to confront and deal with these primary tasks.

We consider that the tasks, conceptually speaking, are arrayed in a roughly developmental order: reasonable success on each task is required for effective work on later-numbered tasks. Naturally, any particular P/I group may or may not see it this way, and we are not positing firm rationality as the guiding light. But it does seem (for example) that coherent design of the school's structures is less likely when the background vision, the collective hope for the school, is diffuse or still in contention. Or, if a P/I group working on staff training just before start-up suddenly finds that their political fences are not as well mended as they had thought, they will have to "return" to the political stabilization task, since political support is essential for effectiveness in the current situation.

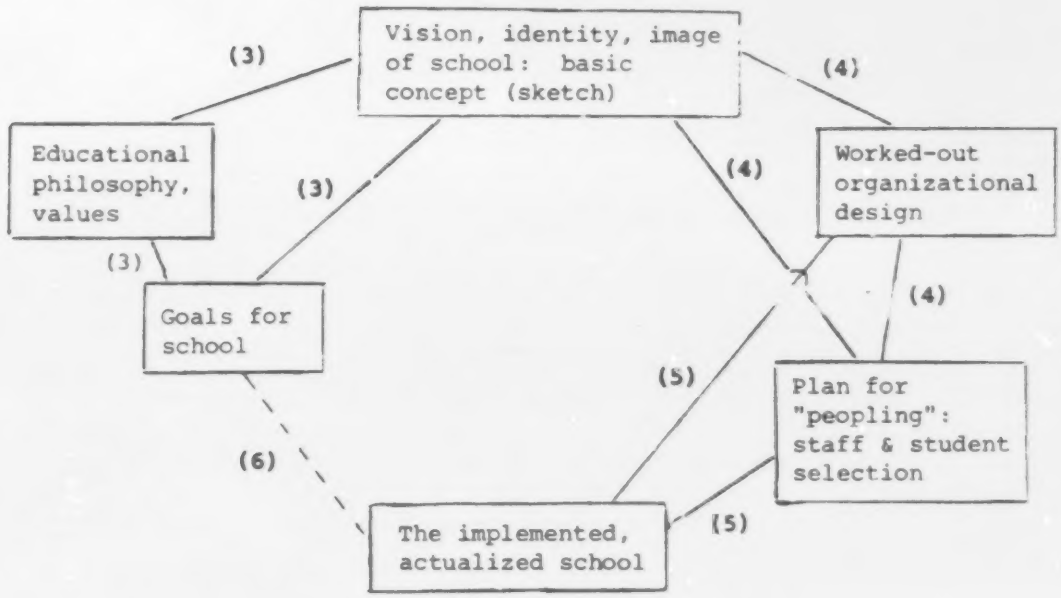
Primary Task 1: Political stabilization. The task here is essentially that of obtaining and assuring a continued flow of financial resources and environmental endorsement, to support not only the planning/implementation process itself, but continued operations of the implemented school. It is essentially one type of input assurance. We have discussed the outcomes of work on this task earlier (p.48); the main dilemma associated with it is "environmental contact vs. withdrawal" (pp. 66-68). The reader is referred to the latter discussion for examples from our sites. We might add a note here: the task of assuring a continued flow of resources implies more than short-run political success: the P/I enterprise, and the new school itself, must be built-in to the immediate power structure, find an ecological niche, so to speak.

Primary Task 2: Knowledge utilization. A second basic type of input to the planning process is that of valid, technically competent knowledge. Since the schools we studied (and indeed all but a very few groundbreaking new schools) are not de novo creations, but rely on the importation and adaptation of educational practice from elsewhere, there is a steady need for P/I groups to locate, interpret and use the best available technical information from outside themselves. As we have seen during the discussion of Dilemma 4 ("expertise seeking vs. self-reliance"), pp.68-71), the task can be avoided on both rational and non-rational grounds, but this does not obscure the fact that the success of P/I efforts does depend in part on the quality of knowledge inputs to the process. Here too we refer the reader to the earlier discussion for specific site examples.

If the two preceding primary tasks are essentially input-assuring, the remaining four can be seen as assuring various outputs of the P/I effort. Figure 2 shows them graphically; they will be discussed one by one, and examples will be suggested from our sites.

Fig. 2

PLANNING/IMPLEMENTATION OUTPUTS



Briefly, Primary Tasks 3, 4, and 5 can be seen as achieving effective linkage[35] among various outputs or products of the P/I group's work, such as a statement of goals, or the organizational design. The corresponding numbers on Figure 2 show where these linkages take place.

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35) The project is indebted to Rein van der Vegt for his active help in proposing and clarifying these ideas.

Primary Task 3: Vision development. Vision development involves the development of coherence among several products of the P/I group's work: their underlying educational-philosophical position, the goals they hold for this school in particular, and their vision (a sort of rough sketch for or image of the school). The linkage question is: do these products match or fit well with each other? Do they form a coherent whole, or are there internal contradictions? For example, in one of our sites (College High School), we noted the following:

Underlying philosophy: The P/I group viewed urban adolescents as having "a wide variety of individual strengths"...and that it was essential to "find better methods of recognizing these strengths and capitalizing upon them"...a uniform method of education will not reach all students... each student should be encouraged to maximize and develop his own full and unique potential." Thus the main theme was respect for individual differences.

A second main theme was knowledge utilization in the school itself: it was to be a campus-based high school, using the latest information from the various disciplines.

Goals: The P/I group developed many goals. Two of the most endorsed ones were (1) to develop a "humane school environment" (non-custodial, oriented to students' needs, etc.); (2) to provide a good learning environment for low-motivated students with poor basic skills.

Vision/sketch: The P/I group outlined a concept called "the family", originally seen as a home-base group involving no more than 25 students; it would bring them together with high school and College faculty members, guidance counselors and paraprofessionals. The "family" would serve to integrate various other aspects of the over-all program, which in addition to a reading program set up at three competence levels, would include work in "moral education", "learning to learn", bi-lingual education, career education, and "external learning" (work and other community experience). The family grew, however, to include 136 students and four faculty. No structure was proposed to support individualized learning.

How well did this P/I group deal with the primary task of vision development? Seen in terms of coherent linkage among philosophy, goals, and the rough sketch, not very well. For example:

1. The emphasis on aiding low-motivated kids with basic skills is not necessarily congruent with the idea of building on strengths, developing unique potential.
2. A "humane" school environment might support individualization, but the philosophy-to-goal linkage is by no means clear.
3. The "family" in its original version would probably be a reasonable actualization of the "humane environment" goal, but not when it ballooned to 136 students.

4. There are no mechanisms or supports proposed to aid individualization; the three reading levels are only an approximation of this in the basic skills area.

5. Though there was a philosophical commitment to using college resources, it remains unclear how this would occur through the "family" and elsewhere. The "external learning" program would seem to divert students from the use of college resources.

P/I groups naturally vary widely in how cleanly or systematically they go about vision development. But the task will not go away if it is not addressed: our thesis is that incoherence here will show up in confused organizational design and uncertain or expedient implementation. (We are not advocating a sequential, step-by-step planning model, only pointing out that vague or poorly-linked visions will influence organizational design and implementation--and may have to be corrected (or at least acknowledged) later on.)

Primary Task 4: Social-architectural design.[36] This task involves the development of an organizational design which is linked to (follows from, is congruent with, matched to) the goals/philosophy/vision of the

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36) This label is drawn from Perlmutter (1965) who first proposed the idea that organizations being created could benefit from the sort of systematic planning attention that the "architecture" metaphor implies. The most recent and useful treatments of organizational design are found in Clark (1972); Kilmann (1977); Kilmann, Pondy and Slevin (1976); Burack and Negandhi (1977); and Pfeffer (1978).

In passing, we might note some things about this literature: first, we concur with Chernes (1976):

> The art of organization design is simultaneously esoteric and poorly developed. Most existing organizations were not born, but "just grewed"....There is, of course, no lack of available models and no one seeking to set up an organization need invent the wheel. But organization design is generally an outcome, not an input.

In fact, the bulk of what is written about organization design is retrospective--is about design, not designing.

Second, there has been very little attention in the organization design literature to the requirements of "people-processing" systems, or to schools in particular; most discussion focuses on thing-producing, profit-making systems.

Third, most treatments emphasize the instrumental, task-oriented aspects of organization design; Pettigrew's (1976) essay on expressive, symbolic and myth-making aspects of organizational creation is a rare exception.

Finally, most treatments of organization design are hung around a rational framework (identify goals, specify tasks, etc.) and take less account of political issues which, as we have seen, are crucial in the creation of new schools. Pfeffer (1976) is the chief exception.

earlier planning, and a relevant plan for "peopling" the design with staff and students, which is well linked with the vision, and with the design. Examples from our sites include:

1. Ellis Brown, the principal of Lincoln Acres, had a reasonably well-developed vision. He had been strongly committed from the time of his hiring to adaptiveness ("openness to needs and opportunities"), and individualization ("not to follow any general prescription of what kids need--idiosyncratic needs have to be identified"). He intended to make maximum use of the school's open space, to have teaching teams, and multi-age grouping to accomplish these goals.

   Brown also wanted the school to "become a lighthouse school. People [in the district] could borrow ideas."

   Some of the social-architectural decisions made as planning proceeded were congruent with this vision, and some were not. For example, Brown and his resource teacher developed a system for record-keeping on individual students' progress in basic skills which would enable closely-tailored individualization.

   On the other hand, Brown decided to accept teachers volunteering from the district who had no experience in team teaching, though that had been initially an important selection criterion in his mind.

   A clear social-architectural decision was made: there would be no team leaders. Made in the spirit of equalitarianism (and possible as a way to heighten team responsibility and ownership) this decision turned out to make it much more difficult for the faculty to be "adaptive", as Brown had hoped. Since there was no easy coordinative mechanism (as would have been the case for a cabinet of team leaders meeting with Brown), problems went longer undetected, communication across teams was limited, and many decisions, instead of being shared by the faculty, drifted to or were pre-empted by Brown.

   Community pressure led to another social-architectural decision inconsistent with the original goals: to reduce the multi-age grouping span from three grade levels to two, and to add partitions separating the groups.

   No explicit mechanism or structure was designed to support the "lighthouse" goal. It is not clear whether the goal simply receded, or whether the P/I group believed that "borrowing" by other district educators would simply happen "naturally".

2. The planners of Arts Coop were committed to several ideas: (1) that it should be a half-day program, taught by working artists, to which students would commute from their regular high schools; (2) that it should be a "community of the arts", with interaction among students and faculty with various art interests; (3) that it should bring together students from urban and suburban settings, aiding integration of these cultures (and racial integration); (4) that it should identify and develop artistic talent.

(cont'd)

In staffing the school, David Steinhoff, the director, concentrated on getting capable artists; he apparently did not weigh their interdisciplinary interest very strongly. The artists he hired in turn selected students from an applicant pool who would work with them in their specialty (e.g., dance, jazz, visual arts, etc.) Thus the "peopling" plan was poorly linked to an important aspect of the vision.

In the last staff meeting before Arts Coop opened, Steinhoff found himself in conflict with several faculty members as the schedule was being designed: he wanted to have a good deal of "interdisciplinary" time, perhaps two days a week, plus time for students to take "elective" courses outside their area. But faculty (some with rather traditional ideas) resisted, saying that they needed time for their subjects. The social-architectural decision made was to limit "interdisciplinary" work to one day a week initially, and to postpone elective work for at least a month and a half. Some faculty members suggested innovative cross-contacts, such as having visual art students sketch in a dance class, but the idea of "a community of the arts" did not get built in strongly to the organization.

Some important social-architectural decisions were approached sketchily and hastily. Grading methods, important both to justify the program to the high schools sending their students and for getting funds--and presumably relevant to the "development of talent" goal--supposedly had to include "numbers or letters" because of state requirements. The faculty had a wandering discussion on whether they would grade by effort, by ability, or both, and whether their courses were to be considered "A" level or "B" level courses. Steinhoff also introduced the idea of a survey of entering students, plus faculty comments on each student, and that of an external evaluation "visiting committee". All these decisions might have rather basic organizational effects, but seemed to get little sustained thought, and were not linked to the basic vision.

No explicit social-architectural work was done to aid urban-suburban, ethnic, or racial integration. As it turned out, by the second week of school strains of this sort were evident among students.

As the reader can see, the social-architectural primary task is a substantial, complex one if taken seriously: the P/I group is constructing an anticipated social reality. Our experience with our sites suggests that P/I group members, though they usually have prejudices and pet solutions to the problem of what a school should look like, tend to focus rather narrowly on the technical aspects of school, and have a very limited grasp of what it means to invent a social system that promises to actualize their vision. The title of our project (Social Architecture in Education) reflects our initial central interest in this task. Though our sites taught us that many other primary tasks faced them (such as political stabilization), nothing we have seen yet minimizes the complexity and significance of social-architectural design.

Primary Task 5: Actualization. This task involves implementing or actualizing the school, bringing about a congruent realization of the organizational and peopling designs. Essentially, the linkage involved is between planning and implementation. Such linkage may be accomplished by various structural means (such as involving implementers in late planning, having the organizational plan on paper, using key planners as advisors,

etc.), as well as by active diagnosis and trouble-shooting of the organization in its early stages, to insure that it is functioning congruently with the P/I group's hopes.

We have already discussed examples of actualization efforts when we explored Dilemma 6 (implementation constraint vs. autonomy, pp.74-77) and Dilemma 7 (laissez-faire vs. intervention), pp.77-79). Review of those examples (and the case studies in Part III of this report will show the reader that actualization is also a formidable, complex task, occupying a good deal of energy if P/I groups choose to take it seriously (i.e., care about achieving a real school that is congruent with the design and the original vision).[37]

Primary Task 6: Institutionalization. The final primary task of P/I groups has already been discussed in connection with Dilemma 8 (routinization vs. flexibility, pp.79-81). The actualized school needs to be stabilized, routinized in a way that enables continued achievement of the original core goals (or, at the minimum, those goals that have survived the exigencies of the P/I process to date). Some aspects of this task will have been faced during social-architectural design work, naturally, but some will not be seriously faced until actualization is confronted. Envisioning an aspect of a new school is a different matter from actually starting it up, which in turn is different from ensuring its continued health and viability--and its real connection to original goals.

The importance of these six primary tasks rests on the thesis that their successful completion is essential to implementation success. That is, if the linkages among the various products of the P/I group (tasks 4-6) have been adequate--and if adequate inputs (tasks 1 and 2) from the environment have occurred--we would presumably note that the school as a social system was reasonably congruent with the original set of goals held by the planners, that key stakeholders were satisfied, that goals were actually being achieved, and that continued capacity to cope with problems and difficulties was in evidence. As with other chains, weak links make for vulnerability. So it is not surprising that dreams, in our sites and elsewhere, do not always become realities.

Planning/Implementation Group Capabilities

Earlier we reviewed eight typical dilemmas faced by P/I groups, as they work on the six primary tasks just outlined. We suggested that the sources of these dilemmas (and tasks) lay in the essential nature of the enterprise of creating a new, innovative school in the American public school setting. As even the limited selection of examples cited shows, different P/I groups come up with rather different positions on each dilemma, and deal with the tasks more or less effectively. The "inherent" forces are obviously not all-determinative, and the exigencies of any particular situation make for some of the differences we have noted.

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37) Both Smith and Keith (1971) and Gross, et al. (1971) devote much of their documentation and analysis to the question of actualization. The reader is also referred to Harrison's very thorough and thoughtful analysis of "start-up" processes in the organization of a new chemical plant (1970).

We believe, however, as Figure 1 (p. 43) indicates, that certain key capabilities or processes within the planning/implementation group will have a great deal to say about how primary tasks are dealt with, any particular dilemma is resolved (and in turn, whether outcomes such as adequate financial support and endorsement, good decisions and successful implementation will result).[38] This section discusses these capabilities briefly, again illustrating with examples from our sites.

Two general points should be made about "capabilities." First, we define them rather generally. Any given capability such as "decision-making skill" is a bundle of many specific behaviors, from stating issues clearly to summarizing, to eliciting participation, to calculating probable effects of a decision. The notion of a "capability" only emerges after the fact, when an observer begins to infer that a P/I group can routinely function well in the domain at hand. A corollary of this position is that our framework cannot be used with any specificity to predict or to guide exactly what should be done in any particular situation to increase the probability of success. All that is clear is that the general capabilities are needed, as the P/I group, working on its primary tasks, faces the dilemmas we have outlined.

Second, the capabilities are defined in functional terms: it matters that they are present, but we do not specify that they must be seen in the behavior of any particular person, such as the P/I leader. Some discussions of the creation of new organizations (Sarason, 1972; Gross et al., 1971) place very strong emphasis on the behavior of leaders and/or managers. While central figures did, in fact, play an important role in all of our case studies, we think it more fruitful to examine the functions that are carried out during planning and implementation in terms of needed capabilities. Those capabilities may be exercised by P/I leaders, by several members, or by P/I groups as a whole--as we shall see in the case studies.

Capability 1: Legitimacy development. An early and important issue within the P/I group is whether it really "has a license to plan" (and later, a license to implement). Does it in fact have the right to proceed, to spend money, to make decisions that will not be capriciously overturned by other groups or roles? Essentially, this means having (or developing) the legitimate power to act. For example:

1. The planning group for College High School contained representatives from the local school district bureaucracy, from the union, and from the college involved. However, the group was defined as accountable to a "Steering Committee" made up of higher-level officials of these three constituencies, who were supposed to make policy level decisions as they developed. Early in the planning, we noted that planning group members, as they bargained and negotiated with each other over various planning issues, sometimes postponed decisions until they could reach their counterpart numbers on the "supergroup" Steering Committee.

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38) We do not wish to imply that implementation success is only a function of what the heroic P/I group does or does not do; if anything, some of the groups we have studied have suffered from a delusion of omnipotence, acting as if they were unable to believe that there could be forces beyond their control. However, the planning and implementation buck has to stop somewhere. The "inherent forces" we have discussed are not inexorable, nor are P/I outcomes fated. The real actions of real P/I groups are at stake, and are worth our central attention.

However, when we asked a planner, much later, whether the existence of the Steering Committee as such had slowed down the planning, he said:

> No...the primary problem was that that group didn't make its charge clear, what the parameters were within which you could work. And on top of that, you were constantly torn between what you felt as a professional and what in reality you knew the constituency you represented wanted.

Thus the "license to plan" was unclear, and the conflicting demands of constituencies had no clear arena within which they could be resolved.

2. During the planning for Arts Coop, a governance structure called the Administrative Council was set up, to which the school would be accountable. It included all the superintendents (or their representatives) from the participating school districts.

   However, the summer before the school opened, a new director, David Kelman, was appointed for IASC, the intermediate educational agency which had played a major part in the early planning (and to which Arts Coop was ultimately accountable). Kelman told David Steinhoff, the school's director, that the Administrative Council structure was "cumbersome," and that Steinhoff should properly report directly to him as agency director. This was only the first round in the power struggle between "the two Davids," a phrase which people used to acknowledge the problem.

   Steinhoff never succeeded in defining the Administrative Council as a legitimate body; in fact, Kelman was far more skillful than Steinhoff in defining the situation in his own, often legalistic, terms--to his decided advantage.

Capability 2: Investment development. The planning and implementation of new, innovative schools, as we have seen, is an enterprise full of uncertainty, complexity and strain. Goals are often diffuse, and the pressures for abandoning them substantial. Those who sign on for the voyage can expect much hardship. Thus it becomes important to insure that P/I group members will be "invested" in the project, will contribute energy and time in more-than-normal amounts--in short, be fully committed to the trip. Such investment cannot, in spite of the hopes of early leaders, always be guaranteed by selecting only true believers (Kritek, 1976; Sarason, 1972), since no one fully recognizes at the outset what life on the voyage will really be like.

Thus the process of developing investment is crucial: it may involve methods such as shared participation in decision-making,[39] fitting roles

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39) Earlier, we referred to ownership of particular P/I decisions as an important intermediate outcome. Investment, as defined here, transcends particular decisions, and refers to the more general sorts of commitment outlined above.

in the new school carefully to the declared interests and skills of people, joint clarification of the shared vision of the school, defining a joint enemy (e.g., the local district bureaucracy) or an "anti-model" (a school we don't want to be like). Intensive workshops or retreats often serve the same purpose.

Investment can, in a sense, be seen as a kind of internal legitimacy: It deals with the question of whether the organization has the "right" to commend allegiance and energy expenditure from its members.

Examples of investment development capability from our sites include:

1. Ellis Brown, the new principal of the Lincoln Acres elementary school, recruited his faculty in February, and held a series of planning meetings with them during the spring, inviting them to make joint decisions on such matters as the arrangement of space, equipment, materials, and instructional objectives. Data collected as early as the second staff meeting indicated that nearly all faculty members felt that being part of the planning team was an important experience. Several mentioned that it created a sense of ownership and gave them a sense of responsibility.

   Brown also decentralized decision-making on many issues to the teaching teams (asking them, for example, to work on materials choice).

   He also obtained funds for a month of joint planning time during the summer to develop role descriptions, plan space use, develop basic skills objectives, even define the decision-making processes and roles of the staff, students and parents. The proposal for the summer planning emphasized the creation of "a personal sense of ownership", saying:

   > ...the obvious alternatives of patterning the school after some other school, modeling it after some theoretical structure, or shaping it according to some administrator's or consultant's thinking were rejected.

   This general planning strategy did appear to develop high faculty investment: their commitment to the arrangement of open space they had developed was so strong that when the principal and resource teacher proposed a reorganization which was a compromise with community pressure for "walls" between teaching areas, there was a sense of shock and depression: the faculty's revised proposal as sent to the Board was stridently worded to communicate their dissatisfaction.

   Even so, when the school opened, most teachers worked daily until 5:00 or 5:30, and often on weekends.

2. The basic planning for the two Westgate open-space elementary schools was done by two central office administrators and four elementary principals.

Donald Martin, a consultant they were considering working with, pointed out that they were not involving any teachers in the planning of such matters as teacher transfers, team composition, grade-level assignments, or the content of summer planning before the schools opened. The P/I group did not hire Martin as a consultant, and reaffirmed their decision to retain decision power over these issues.

Few teachers wished to transfer, and more than a few were required to. Most had little or no experience with, or interest in, open-space methods, or with team teaching. In-service courses during the spring did little to change attitudes. Planning time of one week was allowed for teams during the summer, but they met at different times, and got little help from their principal.

The administrators concluded that they should not press for more "open education" in the new schools; even though they were officially committed to it, they used the words "retreatability" and "flexibility" frequently to characterize their strategy.

Much of the teaching in the two schools observed during the first months of school was relatively traditional. Teachers felt much stress in coping with the noise of open space. The teachers who did the most "open" teaching tended to be those who had already had prior interest in it.

Both principals had had reservations about "open education, and neither did very much directly to encourage commitment to it.

Capability 3: Meta-planning. The planning and implementation of a new school occurs over an extended period of time, usually several years. Many different actors are likely to move in (and out) of the P/I group as the school gradually moves from initial rough conception to design, to staffing, to detailed planning, to start-up, to early operation, and to stabilization. Many unexpected and surprising events occur; failures of implementation are likely to greater or lesser degrees.

Given this sort of setting, it becomes relatively important for P/I groups that there is a reasonably coherent "plan for planning," or background strategy--a design for how to proceed--and that continued "meta-planning" occurs as the work proceeds. Ordinarily, a "plan for planning" will include specification of who should be in the P/I group to begin with,[40] and how this group will be expanded and changed over time; time-tabling of various milestones along the way, such as final approval of funding, selection of a principal, budget allocations, staff selection and training;

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40) For example, the P/I group may contain representatives of some or all of the following: experts (persons with competence in the various aspects of the school as a socio-technical system); operators (persons who will actually administer or teach in the school; gatekeepers (key persons who control access to resources; and clients (persons who will benefit from the schools, including students and parents.)

how planning and implementation will be linked; and what data will be used to steer the work as it proceeds. Meta-plans usually also have implicit features, such as how "the future" is approached (is it gradually backed into, chiseled away at, or explicitly and boldly envisioned?); the degree of design specificity (are we making detailed social blueprints, or only rough sketches to be worked out later?); and whether adaptation of the emerging school to the exigencies of the future is expected to be substantial or minimal. These implicit features of the meta-plan are usually not explicitly "designed" into it, and may even be outside P/I group members' awareness--but they do seem to be there, affecting day-to-day work.[41]

Examples of meta-planning capability from our sites include:

1. The meta-planning for Appelbaum High School differed considerably as between the early and final stages. Prior to the principal's appointment, the P/I group was essentially a single expert "coordinator", Ann Woodward, with some consulting help and an assistant. Timetabling decisions included those for student selection, staffing, summer training and start-up. Woodward collected a good deal of data from the local business community on their employment needs; students were to be involved in a work experience program. She hoped and expected to be named principal (the prime method of P/I linkage) but also designed summer in-service training for staff to insure carry-over of her plans. Woodward approached the future quite directly, envisioning a number of ambitious programs (for example, a business office simulation) and did rather specific designing. There seemed to be little thought given to how the program would need to be adapted to changing circumstances as it unfolded.

2. Ann Woodward, though a semi-finalist, was not appointed principal of Appelbaum. The new principal, Harold Lassiter, did meta-planning as if he were basically determined to do things "right," and do them smoothly. He defined himself, and to some extent the assistant principals, as the P/I group. Timetabling included such issues as whether to open in temporary quarters when construction of the new site was delayed, and the movement to the new building. Lassiter relied primarily on informal data on the progress of final planning and start-up; our project's feedback report on questionnaire results a few months after the school opened did not seem to be actively used. The P/I linkages were largely those which had been set in place by Woodward; they included the summer institute, a few key staff recommendations accepted by Lassiter, and the key contacts Woodward had made with the business community. These linkages seemed to support the continuation of the "letter" of the early planning, but most of the spirit was lost.

   The design specificity continued to be high, and Lassiter approached the future rather directly (e.g., made contingency plans for staffing, and for the opening in temporary quarters).

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41) For more detailed discussion of these features of meta-plans, see Miles (1976).

Lassiter's adaptation was quite minimal initially (it was largely limited to warding off specific problems such as orderly passing in the halls), but later became more substantial. (He carried out an administrative reorganization of the school when it opened in the following fall with doubled faculty and student size.)

Capability 4: Political skill. As we have seen, the work of the P/I group is as much devoted to the acquisition of resources and endorsement from the environment as it is to the internal, "technical" issues of what the school itself is to become. Political strategizing and action become crucial when questions arise like "Will the Board permit us to hire non-certificated teachers?" "How will we get the $25,000 for in-service training?" or "Will the community succeed in blocking the rezoning we know is necessary?"

"Political skill" can be tautologically defined as those strategies and actions that succeed in getting needed financial resources and endorsement from the environment, without jeopardizing other aspects of the school, and if possible, assuring a continued flow of resources and endorsement--in short, coping effectively with Primary Task 1, political stabilization.

In our sites, we have noted several sub-areas or types of needed skill: circumvention, the ability to bend or avoid the effects of constraining rules or procedures; cooptation, the ability to cool out opposition and transform it into support; bargaining, the ability to achieve a negotiated balance of costs and benefits in interaction with others who control wanted resources; coalition-building, the ability to unite oneself and diverse others around a mutual interest, and buffering, the ability to protect the P/I enterprise and the emerging school from external pressures.[42]

Examples of political skill from our sites include:

1. No funds were available for summer in-service training in one of our high school sites. The principal submitted vouchers for services supposedly rendered by a guidance counselor and used the funds to support the training. (Circumvention)

2. The planning group for Arts Coop wanted to hire a director with strong commitment to the arts and the education of talented and gifted children, but the state requirement specified that directors must have administrative certification. The P/I group developed an organizational chart which placed the director of IASC, the regional sponsoring agency, at the apex. Since he was certified, the "director" could thus be said to meet the letter of the regulation. (Circumvention)

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42) For a fuller discussion of the need for political skill in new-school development, and of these skill areas in particular, see Sullivan and Kironde (1976).

3. During the course of final planning for the Lincoln Acres school, there was vigorous parental opposition to the focus on open space. Ellis Brown, the principal, and the faculty decided to hold a series of meetings, team by team, where parents could ask questions and get clarification. The intent was to coopt the parents; this intent also underlay the idea of involving parents as volunteer school aides. Over ninety parents volunteered, and worked regularly in the school. However, the effort backfired: the meetings, fueled by the direct contact the parent volunteers had had with what they saw as poor teaching intensified, rather than defused, the parents' objections. (Cooptation)

4. Several parents from a Westgate open-space elementary school complained to the principal that they did not like the way the program was going for their children. They requested a general meeting of all parents, but the principal refused, understanding quite well that such a meeting would amplify the concerns of a few and lead to the mistaken perception that most parents were against the program. He continued to drag his feet, and tacitly supported the teachers' refusal to hold such a meeting, even when the assistant superintendent pressed for it. The teachers prepared an information handout that explained the program, and its differences at each grade level, which they mailed to the parents. A few parents denounced the program at an open Board meeting, but the teachers rallied in support of the principal, whose performance was being questioned. The program continued as before. (Buffering)

Capability 5: Reflexiveness. We have already suggested that given the uncertainty and indeterminancy of what goes on inside and outside P/I groups, much of their effectiveness may depend on how adequately they are able to monitor the consequences of actions taken, and to connect the data obtained with subsequent decisions. We will not repeat the discussion under Dilemma 5, "Feedback-seeking vs. intuitive action," which emphasized the basic attitudes of P/I group members toward feedback, but only comment here that matters such as the technical adequacy of the data (can it be counted on?), and its incorporation into next-step planning (are meetings evaluated in a knee-jerk way, with little improvement noted subsequently, or does feedback make a difference?) are important aspects of a P/I group's capability. The key query is: does this particular P/I group seem to be able to learn from what it is doing?

An example:

The planning group for CollegeHigh School, faced with massive uncertainties re funding, staffing and a site for the school, tended to engage in "circular decision-making": decisions would be made, forgotten, re-made, unmade, and started anew. Members often forgot decisions. Minutes were not taken.

The reflexiveness of the committee seemed limited to an occasional comment from the chairman like, "Here we go again!". They made little effort to alter their decision-making style, and actively resisted the efforts of two consultants who tried to help them improve their group functioning.

Capability 6: Decision-making skill. Finally, as suggested earlier, any P/I group must make dozens, hundreds of decisions--agreements to commit resources for particular purposes--as it designs and implements the new school. As in the case of "political skill," we are in a tautological position: skill is as skill does--namely, it delivers decisions which are not only "good" but "owned" by their participating deciders. It is possible, however, to think of sub-areas or components of decision-making skill, such as resource utilization (being sure that all members are heard from (Maier, 1952); contingency analysis (the presence of "what-if" thinking when alternatives are assessed); variety protection (the degree to which minority, unusual, and deviant ideas get a hearing); decision model clarity (knowing whether the group is working on an advisory, voting, consensus, unanimity or veto model): and product clarity (the degree to which all understand the decision after it is made).

Some examples from our sites include:

1. As the final plans for Lincoln Acres school were developing, in the context of sharp community conflict, Charles Frisch, a Board of Education member, explored with Ellis Brown, the principal, the idea of surveying the community on their needs and wishes. Brown had always been interested in the idea of a survey, and thought it might relate to his need for a dissertation. At a Board meeting where Brown was asked to defend the current planning, Frisch proposed the survey and the Board decided to require it. Brown decided on his own to have teachers and parents do the survey.

   There seemed to be little discussion of the probability that the survey would further heighten parents' expectations that the school should be changed according to their wishes, and further restrict the faculty's planning. Most teachers were not even aware of the decision until Brown announced it three weeks later at the start of the summer planning workshop, which had to be hastily re-oriented so that teachers and parents could conduct the survey. The teachers were bewildered and angry, and seriously considered refusing to do the survey. Brown apologized, saying "There was no time or access to get to our staff when the decisions were made. If that was wrong, I'm sorry." He advised them to do the survey, and they agreed but wrote a strong letter of protest to the Board.

2. The administrators and principals who comprised the Westgate P/I group, following the recommendations of a facilities consultant, were committed to the idea that all four elementary schools in the district, including the two new schools, should have approximately the same size student population. Achieving this required more than eleven planning meetings between October and April.

   In approaching the task of rezoning school attendance areas, the P/I group was faced with some parental opposition; they did a good deal of contingency planning ("What if the Board delays action on rezoning and it becomes a campaign issue in the upcoming

election?" "What if we polled parents and only 10% favored rezoning?") and developed 16 different alternative rezoning plans for submission to the Board. The plan they felt was best was accepted: it acknowledged parent worries about children's transferring from their neighborhoods by allowing next year's sixth-graders, plus their younger siblings, to be exempted from the rezoning transfer. The plan was well accepted by the community.

The rezoning also involved teacher transfers: a primary issue was whether to involve teachers in the decision-making. Contingency planning also occurred ("What if we don't have enough volunteers?"). The P/I group collected both informal and questionnaire data on teacher wishes and decided to develop the transfer plan without further consultation. Only two teachers had said they would voluntarily transfer and a total of 11 transfers were needed. The P/I group developed a tentative, then firm detailed transfer plan, using the resources of all members. (ex: information on whether a particular teacher was comfortable with team teaching, had poor or good relationships with others in the proposed grade level team), informed those teachers immediately whom they believed would be upset by the decision, and set up get-acquainted meetings between the principals and staff of the schools most affected by the transfers. Although a few teachers were initially upset, the net results of the transfer decision-making seemed to be positive.

P/I Decisions and Actions

To recapitulate: the general context and the demands of the enterprise generate a series of primary planning and implementation tasks, with characteristic dilemmas involved. How these tasks are dealt with depends, we have suggested, on the presence of P/I group capabilities. As these capabilities are exercised, decisions and actions emerge in a steady stream.

A decision, to quote our instructions to field workers, is "a reasonably explicit agreement to do something, usually involving commitment of resources, in the immediate or near future."[43] And actions are the "do something" component.

Decisions and actions are the basic instrumental means through which P/I groups, using their capabilities, bring about more or less successful intermediate and ultimate outcomes. They are the basic stuff of the case studies in Part III of this report, and we do not think it fruitful to try to dimensionalize them here, build taxonomies, or the like.

In the case studies, decisions and actions are embedded in the chronological flow of planning and implementation. However, each case contains recurrent sections devoted to "Key Decisions", so the reader can assess how P/I group capabilities were connected to outcomes in the particular instance at hand.

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43) The reader with worries about over-rationality should be reassured that field workers in our sites also attended to implicit or tacit, "as if" decisions, and to "non-decisions"--failures to attend to issues which seemed to deserve work, on the face of it.

Relationships among Variables

Though Figure 1 gave an overview of how our different classes of variables are related to each other, by this time the reader may well be overloaded, wandering among lists of dilemmas, primary tasks, P/I group capabilities, and outcomes. Figure 3 suggests how all these may be related.

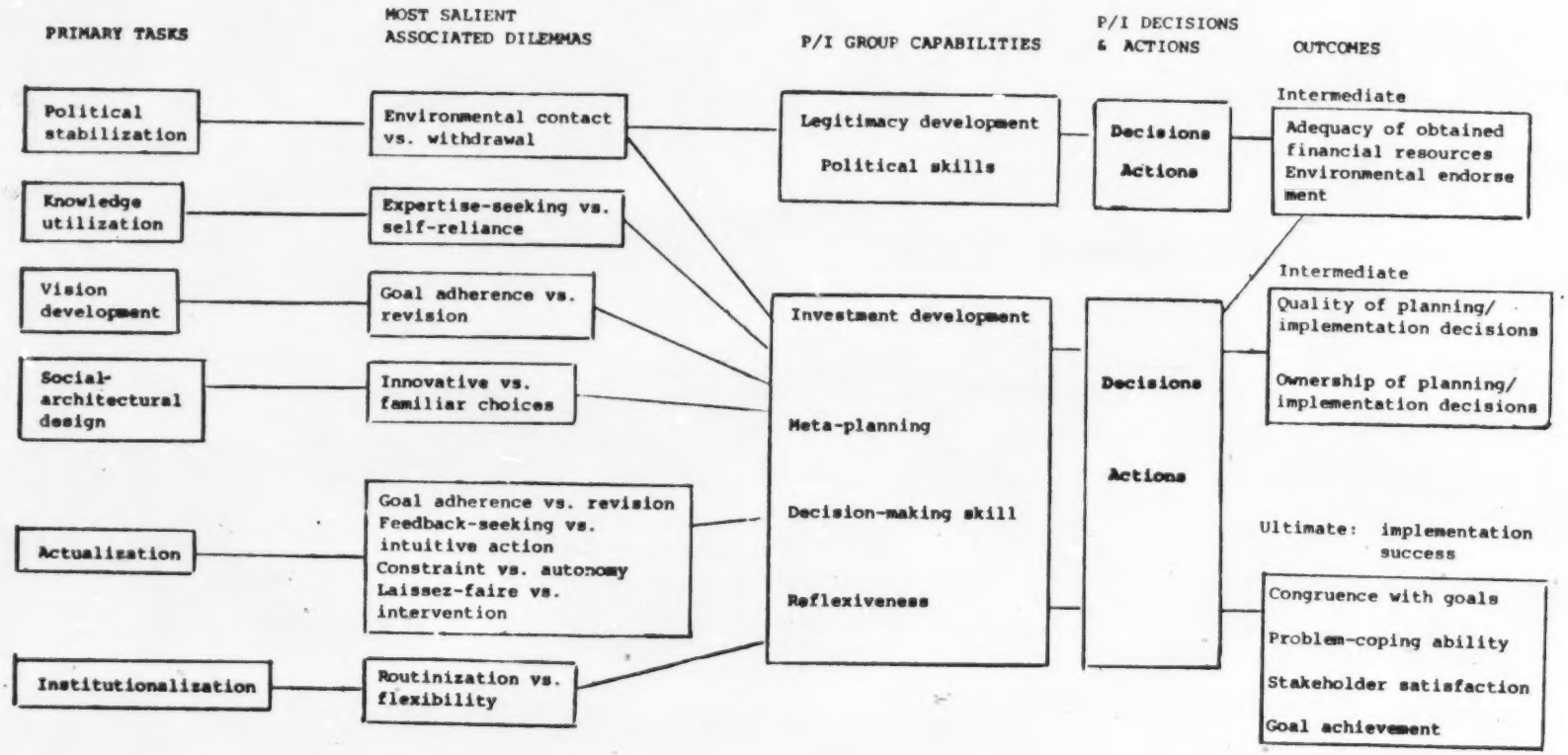
First, we propose that certain dilemmas are likely to be particularly acute as the P/I group encounters certain primary tasks (for example, that goal adherence vs. revision will become salient during the process of vision development, and again during actualization).

Second, while certain P/I group capabilities (legitimacy development and political skills) are most crucial for the primary task of political stabilization and its salient associated dilemma of contact vs. withdrawal, the remaining four capabilities, from investment development through reflexiveness, appear to be capabilities which apply across the board to all tasks and dilemmas. There are no precise "transformation functions" showing how particular capabilities are applied to particular tasks, or to the resolution of particular dilemmas. We also suggest that when P/I groups exercise the pair of externally-oriented capabilities (legitimacy development and political skills), their decisions and actions tend to lead to the attainment of two intermediate outcomes: resources and endorsement. But the other four capabilities, in our view, again, work across the board to produce decisions and actions that affect not only the other two intermediate outcomes but all four ultimate outcomes. We simply do not know enough, given the complexity of what we have been studying, to make more precise connections than this among the variables of the framework.

We hope this recapitulation of our conceptual journey has induced reasonable clarity in the reader's mind. The case studies of our sites which follow in Part III will, we hope, enable the reader to deepen his/her understanding of the concepts talked about, and to test their usefulness in explaining the events we have documented.

Fig. 3

RELATIONSHIP OF MAJOR VARIABLES IN OVER-ALL FRAMEWORK



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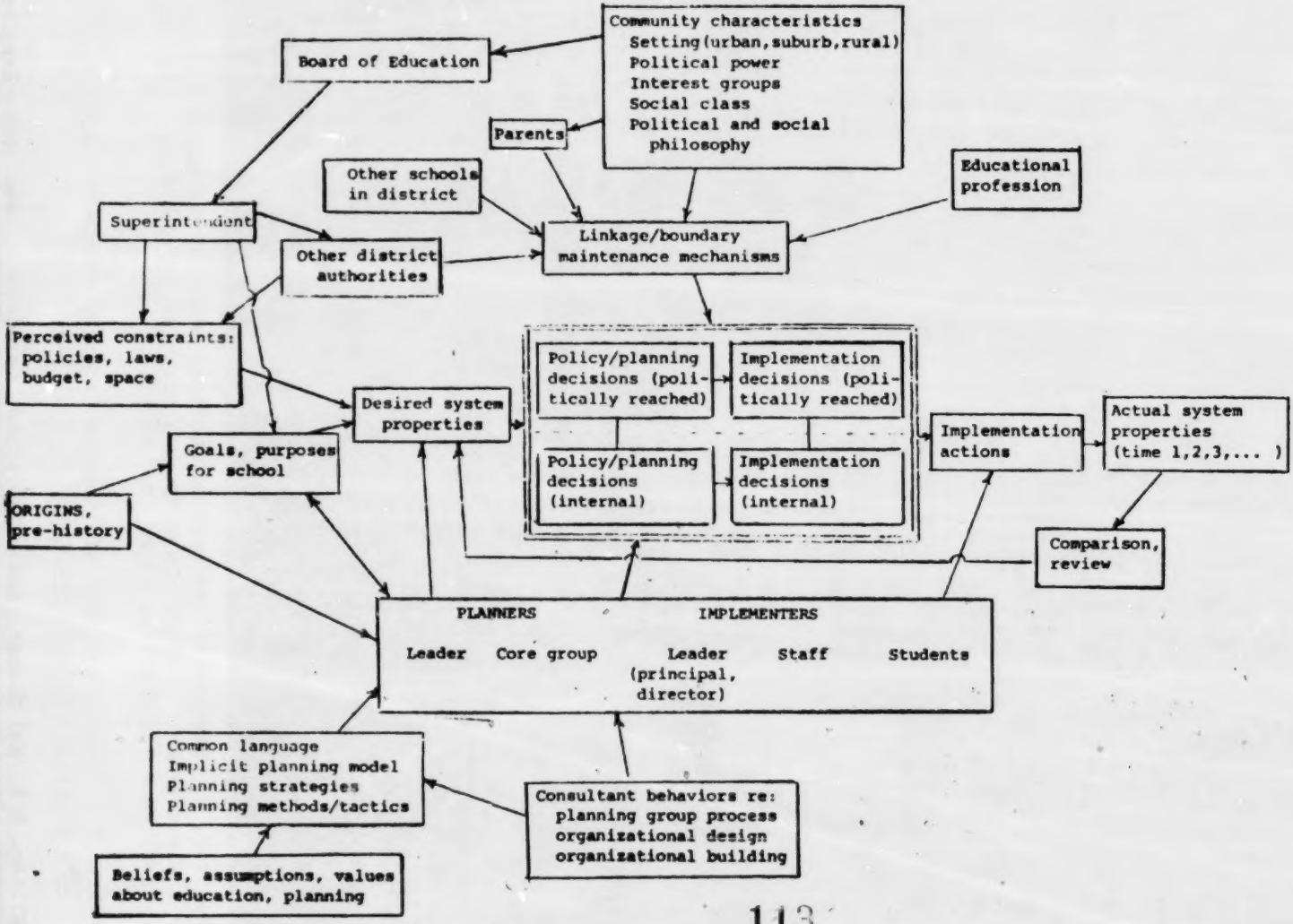
Appendix A INFLUENCES ON DECISION-MAKING DURING THE PLANNING AND IMPLEMENTATION OF NEW SCHOOLS



We quote excerpts from a staff memo explaining the chart:

> The chart focuses on the making of policy/planning and implementation decisions relevant to the creation of new schools. Arrows can be understood as influence and/or information flow. Many arrows omitted for simplicity.
>
> The aim is to specify the main classes of influence which should be explored when we are trying to understand why a particular planning or implementing decision was made. Note that influences are of many different orders.
>
> Some decisions are "internal" ones, made within the planning group, and remain largely "invisible" to other significant actors (ex: whether to have weekly staff meetings in the new school); others must be politically reached, in the sense that actors external to the planners/implementers (either in the district or in the community) must be involved (ex: whether to dismiss students early on the day of staff meetings). Linkage/boundary maintenance mechanisms used for filtering, buffering, permitting influence.
>
> Planners and implementers are seen as a social system steadily growing in size over time (leader, plus core group, plus staff, plus students)... (which) eventually becomes co-terminous with the school itself.
>
> "Desired system properties" [see Appendix B] include not only system-internal features, but system inputs and outputs...
>
> (Almost all of these properties can be seen as applying to the planner-implementer social system, as it develops over time, as well as to the final school itself.)
>
> Once the school has opened for students, actual system properties can be examined by planners/implementers, and a comparison made with what the desired property was new or reaffirmed policy/planning decisions can be made; revised implementation decisions made and new implementation actions (corrections, re-adjustments, etc.) made. This process probably continues for some time (up to two years after opening, some of our interviews suggest), until planners/implementers feel that the school is OK, has settled down, needs little further redesign, etc. (And/or the regular system redesign and renewal mechanism..., are in regular operation.) Examples of these constructs:
>
> Goal: Students should be treated as partners in learning process, not as objects
> Desired system property: teacher-student collaboration
> Policy/planning decision: have a student-faculty curriculum council
> Implementation decision: teacher-student committee writes constitution for council, sets up election procedures.
> Implementation actions: elections held, council begins work
> Actual system property: teachers dominate discussions, non-council students feel their views not represented in council. (new policy and implementation decisions ensure, such as changing constitution, workshop for council, holding open meetings, etc. or adding new structure for such as student grievance channels)

Appendix B SYSTEM PROPERTIES

This is a list of properties which (a) apply to the planner/implementer social system; (b) are the content of planning/policy decisions; (c) are the content of implementation decisions (and actions); (d) appear in the actual social system being produced.

Inputs

1. Resources (must be identified, acquired, allocated)

   a. Money, used for purchase of:

      Staff (with particular skills, values, motivations)
      Materials
      Equipment
      Plant

   b. Information (unspecified category)

2. Clients

   a. Students

   b. Other recipients of services

Transformation system - how inputs are translated into outputs and action

1. Structure (formal)

   a. Governance, decision-making

   b. Role definitions

   c. Group definitions (membership, functions)

   d. Communication flow among groups and roles (as formally defined)

   e. Performance evaluation methods (for adults)

   f. Boundary maintenance mechanisms (in rel. to (a) district; (b) community; (c) parents; (d) profession.

2. Psycho-social (informal system)

   a. Reward system

   b. Norms

   c. Collective sentiments (morale, paranoia, etc.)

   d. Conflict management modes

   e. Communication and influence (informal)

   f. Linking/cliques/friendship subgrouping

   g. Shared values, ideology

   h. Status/prestige system

(Transformation system, cont'd)

3. Technology (means for goal accomplishment)

   a. Student-focused (learning emphasis)

      "Curriculum", subjects, course content
      Materials
      Time use
      Space use
      Teaching methods
      Grading (evaluation)

   b. Other (managerial, maintenance, transportation, etc.)

4. Managerial: leader behavior

   a. Task/socio-emotional functions

   b. Other functions (ex: vision-providing, hope-producing, coordination, etc.)

   c. Power-handling style (vetoing, sole decider, inform subordinates, persuade subordinates, consult for advice, share with subordinates, delegate wholly) on various decisions.

Change and renewal methods

1. Goal-setting

   a. Means for revising, clarifying

   b. Means for increasing goal commitment, ownership

2. Data collection and feedback methods (for assessing system states)

3. Problem-solving methods, skills

4. Methods for learning and development

   a. individual (courses, sabbaticals, etc.)

   b. organizational (OD, team workshops, consultation, etc.)

Outputs

1. Changes in students

2. Other community services

3. Changes in personnel (other than those seen as instrumental to changes in students. Ex: student teacher training)

4. Products useful outside the school (ex: curriculum materials, reports, brochures, etc.)

5. Being a model or force for change in rest of system